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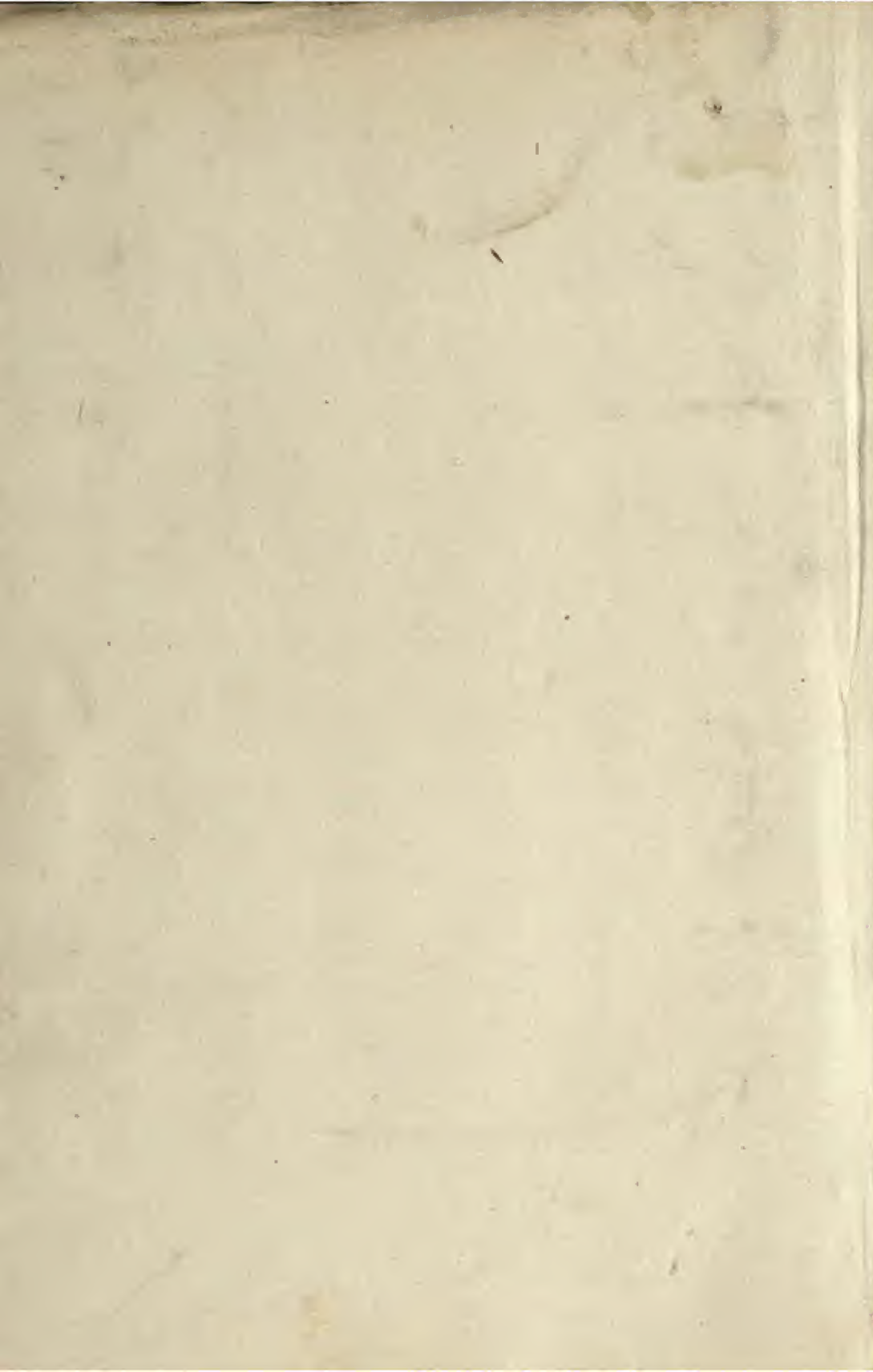
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॥ निंदति चैवं न मिदुकिरा मनुष्यैर्दत्ति ये दमधीमं व्याहनि तथामि न नगरल
 विवकमेष न नल लक्ष्मीरं ॥ सा खिर देत वदीना ॥ माध वमन स्तिल विवि किश्व न या दि व
 न वन या त्व ये ह्यीना ॥ १ ॥

- अ. ८ प. २





Kāma shooting his arrow at Kṛishṇa and Rādhā. Early Rajasthani School, c. 1610 A. D.

A 'GĪTA GOVINDA' SERIES IN THE
PRINCE OF WALES MUSEUM
(IN THE STYLE OF THE 'LAUR-CHANDĀ' AND
'CHAURAPANCHĀŚĪKĀ' GROUP)

KARL J. KHANDALAWALA

The Prince of Wales Museum recently acquired ten miniatures which illustrate the *Gīta Govinda*. The importance of this acquisition lies in the circumstance that these miniatures belong to that rare group which has come to be known amongst scholars of Indian art as the *Laur-Chandā* group, or the *Chaurapañchāśikā* group.¹

The known miniatures in this style are as follows:

- (1) The *Laur-Chandā* series.²
- (2) The *Chaurapañchāśikā* series.³
- (3) The *Rāgamālā* series which belonged to Muni Vijayendra Suri.⁴
- (4) The *Gīta Govinda* series of the Prince of Wales Museum, which forms the subject of the present article.⁵
- (5) One *Rāgamālā* miniature of *Bhairavī Rāginī* in the collection of J. C. French,⁶ and now in the Victoria and Albert Museum, London.
- (6) A single miniature⁶ in the possession of Vijayavargiya of Jaipur which depicts an assembly of writers including Jayadeva, author of the *Gīta Govinda* and Kalhaṇa, the author of the *Rājatarangīṇī*.⁷
- (7) A group of about a dozen miniatures (hitherto unpublished) illustrating the *Bhāgavata Purāṇa* in a style and format almost identical with the Prince of Wales Museum *Gīta*

-
1. The *Laur-Chandā* and the *Chaurapañchāśikā* are stylistically closely related. The former series was originally divided between the Lahore Museum and the Punjab University. Ten of the Lahore Museum miniatures have now come to the Punjab Government Museum at Simla as a result of the partition of India and Pakistan. The *Chaurapañchāśikā* series belongs to Mr. N. C. Mehta of Bombay.
 2. Karl Khandalawala, 'Leaves from Rajasthan', *Marg*, Vol. 4, No. 3. *The Art of India and Pakistan*, 1950, Colour Plate A and Fig. 13. *The Burlington Magazine*, February 1948, 'Western India Painting in the 16th century', by Basil Gray, Figs. 19 and 20 opp. 42.
 3. Karl Khandalawala, 'Leaves from Rajasthan', *Marg*, Vol. 4, No. 3. *The Art of India and Pakistan*, 1950, Plate 81, Fig. 396. *The Burlington Magazine*, February 1948, Fig. 18 opp. p. 41.
 4. *The Journal of Indian Society of Oriental Art*, Vol. 16, Plate 1-3 and p. 10.
 5. Reproduced here for the first time.
 6. *The Burlington Magazine*, February 1948, Fig. 17, opp. p. 41.
 7. Not reproduced.

Govinda series. They are in the possession of Motichand Khazanchi of Bikaner. The name of the artist is inscribed on one of them as Nānā Sāh, the surname Sāh indicating that he belonged to the goldsmith caste like numerous other artists. There are also two similar miniatures with Mr. Haridas of Bombay, one of which, I am told, is of the Museum *Gita Govinda* series, while Mrs. Madhuri Desai of Bombay also possesses a miniature illustrating the Kṛishṇa story.

Some of the important characteristics of the style are as follows, though it should be noted that every feature listed below is not common to every one of the abovementioned miniatures.

(a) Male figures frequently wear a transparent *chākdār jāmā* (four-pointed) of the Akbar period over the *shalwār* (pyjamas). The *jāmā* points, as seen in the *Laur-Chandā* and *Chaurapañchāsikā* sets and in our *Gita Govinda* series, extend a considerable distance beyond the edge of the *jāmā*, more so than is usually seen in Mughal miniatures or miniatures of other schools where the *chākdār jāmā* is worn. In the Vijayendra Suri *Rāgamālā* set only two points of the *chākdār jāmā* are seen. In one miniature (unpublished) of the *Laur-Chandā* series the *jāmā* comes right down to the ground and has a cut on either side. In Pl. I, Fig. 1 of our *Gita Govinda*, the *jāmā* is long and with no cuts.

(b) Male figures wear the Akbar period small compact *aṭṭaṭī* turban, but unlike the Akbar period turban it usually has a *kulāh* (conical cap) in the centre. This is a very noticeable characteristic of the style, though the length of the *kulāh* varies in the different sets. The *kulāh* is very tall in the *Chaurapañchāsikā* series and shorter in the other sets. It can almost be said that this type of turban with *kulāh* is the hall-mark of the style. The small *aṭṭaṭī* turban without the *kulāh* is however also seen on occasion.

(c) The women have long, oval, staring eyes, with the white of the eye very prominent; beak-like sharp projecting noses; and narrow pointed chins with a roll under the chin. This facial type, is derived *directly* (in every detail) from the facial types of the Gujarati Ms illustrations, save that the further projecting eye is absent. The correctness of the above statement can be verified by reference to the Gujarati type Ms illustrations of the Jaunpur *Kalpasūtra*⁸ dated 1465 A.D. and the Mandu *Kalpasūtra*,⁹ dated 1439 A.D. But it should be noted that in our *Gita Govinda* set the fore-

8. Moti Chandra, *Jain Miniature Paintings from Western India*, 1949, Figs. 99-105.
9. National Museum, New Delhi. Not reproduced.

head is more rounded than in the other sets, and the faces are more plump.

(d) Male faces have the same type of eye and the same type of nose as the female faces; curved moustaches and side-whiskers are common.

(e) The women are narrow waisted; they wear *ghāghrās* (skirts) frequently of a check-pattern, while tucked into the stomach in front of the skirt hangs a long *paṭkā* (sash), the lower end of which stands out prominently at a sharp angle (whether the figure is standing or seated) as though it had stiffening in it (but this is only a mannerism).

(f) The transparent *oḍhnī* (wimple) worn by women stands out behind the head, balloon-like, while the tasselled ends of the *oḍhnī* stand out at sharp angles from the body, as if the *oḍhnī* had stiffening in it (but this again is only a mannerism).

(g) Trees, whenever they appear, are highly formalized, while spray-like plants of different shapes and sizes, with or without blossoms, are also frequently seen. A point of importance to note is that some of these stylized trees have a regular circle of white star-like blossoms around the fringe. This is seen in the *Chaurapañchāśikā* set,¹⁰ in one of the miniatures of the *Laur-Chandā* set;¹¹ and in our *Gita Govinda* series (Pl. I, Fig. 1). The palm tree and the plantain are also seen in some of the sets.

(h) Wherever architecture is seen, the domes are of the low quarter-circle type, or of the plain semi-circular type. Such domes denote an early type of architecture but this fact is of no assistance to us in dating these sets because similar domes are seen even in mid-17th century miniatures.

(i) Rooms are frequently fitted with patterned cloth pelmets draped along the top of the room. Tassels are attached to the pelmets.

(j) The lower border of the miniature often has a peculiar design on it as in Pl. I, Fig. 1. A somewhat similar design is seen in one of the *Chāurapañchāśikā* miniatures.¹² In the *Laur-Chandā* set an elaborate floral pattern is sometimes seen at the base of the miniature (*Art of India and Pakistan*, 1950, Colour Plate A). In French's *Rāginī* the border at the bottom of the miniature¹³ consists of lotus

10. *The Art of India and Pakistan*, Plate 81, Fig. 396 (bottom).

11. Not reproduced.

12. *The Burlington Magazine*, February 1948, Fig. 18, opp. p. 41.

13. *Ibid*, Fig. 17 opp. p. 41.

flowers, birds, and a duck swimming in the water, and a very similar pattern is seen on the lower border of one of our *Gīta Govinda* miniatures (Pl. II, Fig. 2). It is also seen at the bottom of one of the *Laur-Chandā* miniatures.¹⁴

(k) In the *Laur-Chandā* and *Chaurapañchāśikā* sets, the women's breasts are just two regular circles, the further breast protruding forward to indicate its existence but with a half or three quarters of it hidden by the nearer breast. This is a most unusual treatment of the breasts. This treatment is not seen in French's *Rāgini*, perhaps due to the pose, and is totally absent in the Vijayendra Suri *Rāgamālā* and also in our *Gīta Govinda* set. In both these last mentioned sets the treatment of breasts is in the normal manner. This peculiar treatment of the breasts in the *Laur-Chandā* and *Chaurapañchāśikā* sets can be seen even in some Gujarati Ms illustrations of the 14th century (*Journal of Indian Society of Oriental Art*, Vol. 5, Pl. 1, Fig. 1).

(l) In the *Chaurapañchāśikā*, *Laur-Chandā* and Vijayendra Suri *Rāgamālā* sets, the *choli* (bodice) is somewhat long and often with characteristic designs, particularly on the sleeves; while another feature of the designs on the *choli* is the pattern which forms a circle exactly round the nipples (*Art of India and Pakistan*, Pl. 81, Fig. 396 (bottom)). In our *Gīta Govinda* set the *choli* is shorter, and the characteristic designs on the sleeves and round the nipples are totally absent.

(m) In the *Chaurapañchāśikā*¹⁵ and Vijayendra Suri *Rāgamālā*¹⁶ sets, a strip of curly clouds, cutting one corner of the picture, is seen, and it is hemmed by a thin black line following the curly formation of the cloud-strip. In the French *Rāgini* and in our *Gīta Govinda* a strip of curly clouds extends along the entire top of the miniature and so also in some examples of the Vijayendra Suri *Rāgamālā* set.¹⁷ The thin black line hemming the cloud-strip is seen in French's *Rāgini*, but not in our *Gīta Govinda*. This curly strip of clouds cutting one corner of the picture is seen in the *Mandu Kalpasūtra* of 1439 A.D., and it continues to be seen upto 1634 A.D. in the National Museum's *Rasikapriyā* (*Marg*, Vol. 4, No. 3, Fig. 15 opp. p. 15).

(n) The colouring in the *Laur-Chandā*, *Chaurapañchāśikā* and *Gīta Govinda* sets is very rich with strong reds and blacks. I under-

14. Not reproduced.

15. *Art of India and Pakistan*, Plate 81, Fig. 396 (bottom).

16. *Journal of the Indian Society of Oriental Art*, Vol. 16, Plate I (bottom).

17. *Ibid*, Pl. 1 (middle).

stand the same is true of French's *Rāginī* and the Vijayendra Suri *Rāgamālā*.

(o) In all these sets the women wear necklaces of similar pattern, the lowest being a big solid semi-circular *hāra* usually with a little point in the centre (Pl. III, Fig. I). It often looks as if it was braiding along the neck-opening of the *choli* (not being depicted clearly as a necklace). In Pl. III, Figs. 1 and 2 and Pl. IV, Fig. 1 some women wear a long piece of ivory horizontally placed through the lobe of the ear. This type of ear-ornament is also seen in the *Chaurapañchāśikā*¹⁸ and *Laur-Chandā*¹⁹ sets.

(p) The long plait of hair worn by women is often bound with little white flowers. This is to be seen in all the sets.

Having regard to the characteristics listed above, there is no doubt that all the sets are stylistically related. The Vijayavargiya miniature of the conclave of writers and poets has only male figures in it, but they are similar in type and costume to the male figures in the other sets. The colour scheme, however, is pale with white predominating. This pale colour scheme is very different from the hot tones of the miniatures in the other sets.

Three questions arise for consideration as a result of the study of these related sets.

- (1) What is their provenance?
- (2) What are their dates?
- (3) What is their relationship to or connection with the established schools of Indian miniature painting?

Before I attempt to deal with these none too easy problems, it is necessary to state that there exists an unpublished illustrated Ms which throws some light on the questions we are considering. Dr. Moti Chandra and I, in collaboration with another, will shortly be publishing this but till then we have been requested not to reproduce any part of it. It is a Digaṃbara Jaina Ms with numerous illustrations having so many of the features which are characteristic of the *Laur-Chandā* and *Chaurapañchāśikā* group, that it is obvious that it was from such a Ms that the *Laur-Chandā-Chaurapañchāśikā* group developed when Mughal painting began to exercise an influence towards the end of the 16th century on the stereotyped styles of book illustration that prevailed prior to the coming of the

18. *Marg*, Vol. 4, No. 3, Fig. (centre woman), p. 12.

19. *Art of India and Pakistan*, Plate 81, Fig. 396 (top)—woman at extreme right.

Mughals and which continued till about circa 1590 A.D. The date of the manuscript is 1540 A.D. and it was painted in Delhi. It contains a specific reference to the rule of Sher Shah. This interesting and important colophon definitely supports the plausible, though tentative, conjecture made by Dr. Moti Chandra and the writer as far back as 1950²⁰ that the *Laur-Chandā* of the Lahore Museum belongs to a Northern area such as Uttar Pradesh where the Avadhi language had its greatest vogue. I will refer to this manuscript in the present article as the *Digambara Ms.* The *Laur-Chandā*, *Chaurapañchāśikā* and *Gita Govinda* sets are, in my opinion, very considerably removed from the *Digambara Ms* in date, being in every way far more accomplished and sophisticated. In particular, the technique of the sets which we are considering, is greatly in advance of that of the *Digambara Ms.*

I will now briefly enumerate certain characteristics of the *Digambara Ms* in order to show that it was the influence of Mughal painting on the style of the *Digambara Ms* which gave birth to the style of the *Laur-Chandā*, *Chaurapañchāśikā* and other related sets.

(a) Males wear the small flat *aṭpaṭī* turban, usually with the projecting *kulāh*. But the typical Akbar type *aṭpaṭī* turban, with one or more narrow ribbons at the back of the head, as in Pl. I, Fig. 1 is never seen. The projecting *kulāh* is a short one as in the *Laur-Chandā* set, the turbans being similar to those seen in that set.

(b) In several miniatures the men are dressed in *jāmās*. Two types of *jāmās* are seen. One is a straight long *jāmā* down to the ankles as seen in the Chester Beatty *Nujūm-ul-Ulūm* of 1570 A.D.²¹ and in some of the Deccani *Rāginīs* of the early Bijapur school, c. 1590-1600 A.D.²² A *paṭkā* (waist-sash) with plain narrow sash ends of moderate length is worn with the *jāmā*. The second type of *jāmā* extends to only a little below the knees, showing the *shalwār* (pyjamas). A *paṭkā* with hanging ends is also worn with this second type of *jāmā*. The characteristic turban with projecting *kulāh* is worn not only by those who wear *jāmās* but also by numerous men (retainers, soldiers, etc.) who are clad in *dhotīs* and who are otherwise bare from the waist upwards except for a *dupaṭṭā*. Some men wear only a *shalwār* (pyjama) and the characteristic turban with *kulāh*, being bare from the waist upwards. In battle scenes and military formations, men wearing *jāmās* as well as men wearing *dhotīs*, are seen fighting on the same side, and all wear the characteristic turban with *kulāh*.

20. *Marg*, Vol. 4, No. 3, pp. 24 and 49.

21. Arnold and Wilkinson, *The Library of Chester Beatty*, 1936, Vol. 2.

22. H. Goetz, *The Art and Architecture of Bikanir*, Pl. II.

(c) There is no mistaking that the facial types, both male and female in the *Digambara Ms* are very similar to those of the various sets which we are considering. The resemblance between the types in the *Digambara Ms* and those in the Vijayendra Suri *Rāgamālā* is particularly striking. In the *Digambara Ms*, the projecting further eye of the Gujarati *Ms* illustrations, is absent, but several other features of Gujarati *Ms* illustrations are nevertheless to be found in it.

(d) The women wear *ghaghrās* (skirts) and *paṭkās*, the ends of which stand out stiffly in front. They also wear *oḍhnīs* (wimples) but these are never transparent. The technique of depicting diaphanous materials was yet unknown to the painter of the *Digambara Ms*. These *oḍhnīs* are of thick material, draped slantwise across the body in the *Nujūm-ul-Ulūm* style after covering the head. In the *Nujūm-ul-Ulūm* the head is not covered, and the garment which crosses the body slantwise, is not an *oḍhnī* but really part of the *sārī*.²³ In the *Digambara Ms*, that portion of the *oḍhnī* which drapes the head, stands out 'balloon-like' behind the head in the manner seen in the early *Laur-Chandā* miniatures²⁴ of the Bhārat Kalā Bhawan, Banaras.

(e) The trees are absolutely formal and stylized (like the tree 2nd from left in Pl. IV, Fig. 1) but no meandering creeper-like plants, such as appear in the groups we are considering, are seen though a few trees with sprays do appear. But the plantain tree is seen.

(f) The architecture, though very crude, resembles that of the sets we are considering, with low quarter-circle or semi-circular domes of the Tughlak period.

(g) The curly strip of cloud, hemmed with a thin black line cutting one corner of the picture, is seen.

(h) Ends of hair are shown as wire-like strands just as in the groups we are considering (See Pl. III, Fig. 1).

(i) A pool of water, with fish and lotuses in it, surrounded by a brick-work wall is seen and a similar motif appears in the *Chaura-paṅchāśikā*.²⁵

As already observed there can be no doubt whatever that many elements in the style of the groups which we are considering can be traced to manuscripts such as the *Digambara Ms* which represents

23. Arnold and Wilkinson, *The Library of Chester Beatty*, Vol. II, Plate 5.

24. *Marg*, Vol. 4, No. 3, Fig. 12 on p. 12. *The Art of India and Pakistan*, Plate 82, Fig. 398.

25. *Ibid*, Plate 81, Fig. 396 (top).

one variety of the stereotyped book illustration which existed mostly in Jaina centres before the advent of the Mughal and which continued till nearly the end of the 16th century when the influence of Mughal painting brought about a change of outlook. But that circumstance would not have solved our problem of provenance even though with regard to the date we would not be far wrong if we separated the *Laur-Chandā*, *Chaurapañchāsīkā* and *Gīta Govinda* from the *Digambara Ms* by at least 50 to 75 years. In my "Leaves from Rajasthan", *Marg*, Vol. 4, No. 3, I said it was not likely that the *Laur-Chandā* and *Chaurapañchāsīkā* group could be earlier than 1610 A.D. and that viewpoint appears to be re-inforced by the find of our *Uttarādhyayana Sūtra* of 1590 A.D.²⁶

With regard to the *Digambara Ms*, it is important to note that it is in many respects crude and archaic—all representations are against an absolutely flat surface with not even an elementary sense of spatial relationships; and the figures are all very squat, even more so than in the Vijayayendra Suri *Rāgamālā* series. Of course, it may be said that the *Digambara Ms* though attractive in colouring was painted by somewhat inferior craftsmen, while the *Laur-Chandā* and other sets are by superior artists, and, therefore, the theory of a considerable time-lag is not justified. But it is significant to note that there is not a single miniature in the *Digambara Ms* in which the characteristic transparent Akbar period *jāmā* or any form of the *chākdār jāmā* appears. But the transparent *jāmā*, both *gherdār* and *chākdār*, does appear in all the other sets which we are considering. The presence of the transparent *chākdār jāmā* is a sure indication of Mughal influence. This *chākdār jāmā* is not even seen in the Deccani *Nujūm-ul-Ulūm* of 1570 A.D., as far as I am aware. It appears in Mughal painting for the first time in the *Hamza Nāmāh* done during the period 1567-1582 A.D., and it appears in Deccani painting round about 1590 A.D. in the Bijapur *Rāginīs*. It is not seen even in the Gujarati style *Ms* of the *Uttarādhyayana Sūtra* of 1590 A.D.²⁷ where Mughal influence is for the first time observed in a *Ms* in the Gujarati style. The *chākdār jāmā* makes its appearance in miniatures, other than those of the Mughal school, sometime after 1590 A.D.

Now the *Uttarādhyayana Sūtra* of 1590 A.D. has both male and female facial types from which the facial types of our *Gīta Govinda* could have been derived. The derivation is quite apparent if the features²⁸ are studied without any bias in favour of pre-concieved theories. The *Gīta Govinda* miniatures, however, are in every res-

26. *Marg*, Vol. 4, No. 3, Figs. 4-6, opp. p. 7.

27. *Marg*, Vol. 4, No. 3, Fig. 4, opp. p. 7. Norman Brown, *Manuscript Illustrations of Uttarādhyayana Sūtra*, 1941.

28. *Ibid.* See the illustration of the 1590 *Ms* therein.

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1593

pect more advanced than those of the *Uttarādhyaṇa Sūtra* even in the treatment of the trees and sprays, and the drawing of the figures. Thus our *Gīta Govinda* cannot be earlier than 1610 A.D. It may be somewhat later. Norman Brown²⁹ rightly puts the Vijayendra Suri *Rāgamālā* series a little later than the *Uttarādhyaṇa Sūtra* of 1590 A.D. It may roughly be c. 1600 A.D. With its squat figures and less accomplished manner, it appears to be the earliest set of the groups which we are considering. All the other sets are more or less contemporary with each other, and not to cut the matter of dates too fine, we may say that the group we are considering belongs to the first quarter of the 17th century. The Vijayavargiya miniature also goes to confirm this early 17th century dating.

Thus, the conclusion which I had arrived at in "Leaves from Rajasthan", *Marg*, Vol. 4, No. 3, as to the date of the *Laur-Chandā* type of painting, namely c. 1610 A.D. does not yet require revision. On the contrary our *Gīta Govinda* set, which is obviously later than the *Uttarādhyaṇa Sūtra* of 1590 A.D., would go to confirm that date, if all the other material which I published in "Leaves from Rajasthan", *Marg*, Vol. 4, No. 3, such as the dated *Daśamaskandha* of 1610 A.D. is taken into consideration. I would, however, like to point out that since I wrote in *Marg*, Vol. 4, No. 3, I have discovered another *Daśamaskandha* in exactly the same style as that dated 1610 A.D. but bearing the date 1598-1599 A.D. This would indicate that from 1590 to c. 1610 A.D.—the formative period of early Rajasthani painting—we expect to find, on the whole, rather crude workmanship, while sets like our *Gīta Govinda* probably represent a further stage in the development of early Rajasthani painting, extending between 1610 to c. 1635 A.D. I am assuming that our *Gīta Govinda* is Rajasthani in origin, which I believe it to be. There is a Rajasthani *Rāgamālā* set dated 1605 A.D. painted at Chawand which was the capital of Mewar upto about 1615 A.D. Most of its examples, including the one bearing the date, are in the Kanoria collection, Calcutta, while one is in the Khazanchi collection of Bikaner, and one, a rather pretty *Rāginī Toḍī*, is in my possession. Our *Gīta Govinda* set has several points of similarity to the Chawand set of 1605 A.D. Each set has yellow borders with red lines; the treatment of the sky and curly strips of cloud in Colour Plate A is very similar to the sky and cloud treatment in several examples of the Chawand set; the blossoming spray-like plants are present in both sets; the male types and their costumes are also very similar though the Akbar period *aṭṭaṭī* turban, in the Chawand set of 1605 A.D., has no projecting *kulāh*; a *pagrī* with a feather stick-

29. *Journal of the Indian Society of Oriental Art*, Vol. 16, p. 3, where Brown suggests 1610 A.D.

ing out of it (like that of Krishna in Colour Plate A), is seen, only the feather is a very long one. The women-folk, however, are somewhat different in the two sets, both in facial type and costume; but the big, oval staring eye is present also in the Chawand set. There are also many colour similarities. One cannot escape the feeling of a family resemblance between certain of the miniatures in our *Gita Govinda* set and certain miniatures the Chawand set of 1605 A.D. Accordingly, I would not be at all surprised if our *Gita Govinda* set is also from Mewar, though just a little later than the Chawand set of 1605 A.D. Incidentally, the find spot of the *Gita Govinda* set was Mewar. Could it, however, be from Jaisalmer? The styles of Jaisalmer await proper analysis. A school of painting in Jaisalmer did exist.

If this tentative theory of a Rajasthani origin for our *Gita Govinda* set is correct, then does it follow that the *Laur-Chandā* and *Chaurapañchāśikā* and Vijayendra Suri *Rāgamālā* sets are also from Mewar or is the Punjab or Uttar Pradesh a more likely area? Although these sets are sufficiently closely related to our *Gita Govinda* set to enable us to predicate that all were done during the first quarter of the 17th century, yet it is not unlikely that the style of the group we are considering was not confined to one province. The style with slight variations may have existed simultaneously in various parts of Rajasthan, Punjab and Uttar Pradesh. In the *Laur-Chandā* set of the Lahore Museum, the text is in Avadhi with Persian script. That ordinarily, though not necessarily betokens a provenance such as Uttar Pradesh or the Punjab rather than Mewar. In the *Chaurapañchāśikā*, the text is Sanskrit in Devanāgarī script. The same is the case with our *Gita Govinda*. The language of the Vijayendra Suri *Rāgamālā* set is Braj Bhāshā as appears from the verses Norman Brown has published in his article thereon and its provenance may be the Punjab or Uttar Pradesh.

But why does it happen that in all these sets which we are considering we find male characters wearing a turban with a projecting *kulāh*? We do not see this type of turban in Mughal painting nor in any other group of Indian miniature, apart from the group under discussion and in the *Digambara Ms.* The turban with the *kulāh* is observed only once in a miniature of the Udaipur *Bhāgavata Purāṇa* of 1648 A.D. painted by Sāhabādī.³⁰ Could it be a style of headgear that came from the South and had a short and limited vogue in certain parts of the country, such as Mewar and Uttar Pradesh? One circumstance of interest is that a rather similar type of turban with projecting *kulāh* is seen commonly in the

30. *Marg*, Vol. 4, No. 3, 'Leaves from Rajasthan'.

Digambara Jaina frescoes³¹ of Jaina *bastis* of Tiruparuttikunaram about two miles from Kanchipuram. I used the phrase 'rather similar' because in these frescoes the *kulāh* is curved on one side. These frescoes are of the Vijayanagar period as is evident from the women-folk depicted therein, and probably belong to the late 16th or the 17th century. The turban with *kulāh* (the *kulāh* in this case may be an integral part of the turban) is worn by men wearing long *jāmās* coming to the ankles, and also by retainers wearing *dhotīs* and long jackets extending half-way down the thighs. Though the frescoes depict the lives of the Tirthaṅkaras, the painters have obviously introduced the costumes and paraphernalia of the great Vijayanagar kingdom. Some of these costumes may have been influenced by contacts with the Deccani Sultanates during the 16th century, or with the Bahamani kings during the 15th century. Now when we turn to the *Digambara Ms*, we find in one miniature a man dressed in a long *jāmā* seated with his bride. Instead of wearing a turban he wears the long 'dunce-cap' like that of the Vijayanagar kings. In front of him are musicians some dressed in *jāmās* and turban with projecting *kulāh* and some in *dhotīs* but wearing the same type of turbans. Does this miniature suggest any Deccani or Southern influence in the *Digambara Ms*? The Digambaras were very powerful in the South. The long dunce-cap-like hat does not necessarily suggest Vijayanagar influence. It may be just a pointed cap worn on the occasion of marriage. Whether the dress of the women folk has Deccani or Southern influence also requires investigation. The *Digambara Ms* was painted in Delhi by a *kāyastha* family of artists, and yet the possibility does exist that they, at least to some extent, copied a style having Vijayanagar influences which perchance they had seen in illustrated Digambara *Mss* brought by Digambara Jains from the South to the North. These are all conjectural matters. But we can be sure of one thing, namely, that the *Digambara Ms* of 1540 A.D. represents an extension of the Gujarati or Jaina style³² to Delhi area, just as the *Kalpasūtra* of 1465 A.D. represents the extension of this style to Jaunpur and the *Kalpasūtra* of 1439 A.D. represents the extension of this style to Mandu. The mere fact that the *Digambara Ms* does not employ the convention of the further projecting eye is a matter of no consequence because if one inserts the further projecting eye we get facial types similar to those of the Mandu and Jaunpur *Kalpasūtra* manuscripts. It appears that the Gujarati or Jaina style was prevalent all over the country with local variations. In every case it was a stereotyped style of book illustration, and technical excellence was not often seen

31. Rambach and Golish, *The Golden Age of Indian Art*, 1955, Pl. 56.

32. Dr. Moti Chandra calls it the Western Indian style; Rai Krishnadasa calls it the Apabhramśa style; while I still prefer the nomenclature Gujarati style, because I believe it largely emanated from Gujarat, under the influence of the Jains. Some still call it the Jaina style. It had local variation in different parts of India.

save in very opulent manuscripts such as the *Devsānopādā Kalpasūtra* of c. A.D. 1475.³³ That this Gujarati or Jaina book illustration style with its local variations existed in many parts of the country right from the 11th-12th century down to the late 16th century is now an established fact. The *Digambara Ms* represents a local variation of the Jain style in the Delhi area at the time when Humāyūn had fled or was about to flee the country and Sher Shāh was establishing himself. There was no Mughal school of painting in 1540 A.D. The Mughal school is really a creation of Akbar's reign (1556-1605 A.D.). Nor can we talk of any Sūr style of painting in 1540 A.D. because the Sūr dynasty only established itself at Delhi in 1540 A.D. Nor do we know of any Tughlaq or Lodī style of painting to which we can relate the *Digambara Ms*. The correct position appears to be that the Gujarati or Jaina style when practised in a locality such as the Delhi area adopted costumes such as the long *jāmā* certainly worn in Humāyūn's time and possibly even earlier by the Lodīs and Tughlaqs. Whenever this style depicted architectural features it painted the low plain Tughlak and Lodī domes which were strewn all over Delhi. In other words the Jaina style as practised in the Delhi area introduced a local flavour into the illustrations of Jaina religious scriptures. But despite the novelty of this local flavour the style basically remained a stereotyped Jaina style of book illustration. Even in the *Devasānopādā Kalpasūtra* of 1475³⁴ local flavour in the matter of costumes can be seen in the Timurid type *jāmā* which was probably in vogue at the court of the Gujarat Sultāns. But the mere introduction of differing costume details does not make for a different style of painting. In the *Digambara Ms* we have no new unexpected tradition. Having regard to our knowledge of the *Devasānopādā*, Jaunpur and Mandu manuscripts we would naturally expect other local extensions of the Gujarati or Jaina style, and thus the discovery of the *Digambara Ms* confirms the viewpoint that such local extensions of the Jaina style existed in several parts of the country. It appears to me that the turban with projecting *kulāh* seen in the *Digambara Ms* is the turban commonly worn during the reigns of Babar and Humāyūn and perhaps even earlier by the Lodīs and Tughlaqs, and was accordingly used in the *Digambara Ms*. This style of turban must have lingered on in certain provincial centres though it ceased to be in fashion at the Imperial court during Akbar's reign. We know, for instance, that several Mughal fashions lingered on for three-quarters of a century in certain provincial centres after they had gone out of vogue in the Imperial cities. That appears to be

33. *Marg*, Vol. 4, No. 3, 'Leaves from Rajasthan'.

34. I think there cannot be much doubt that the *Devsānopādā Kalpasūtra* is circa 1475 as pointed out by me in 'Leaves from Rajasthan' *Marg*, Vol. 4 No. 3. Gray's 16th century ascription of the *Ms* based on what he calls 'muskets' appearing in an illustration belonging to Sarabhai Nawab is not convincing. In the first place what he calls 'muskets' appear to be other things.

the reason why we see 'his style of turban in sets such as *Laur-Chandā*, *Chaurapañchāśikā* and our *Gītā Govinda*, though it was not in vogue at Akbar's court.

In this connection we also have to consider the miniatures of the Bhārat Kalā Bhavan, Banaras (*Art of India and Pakistan*, 1950, Plate 82, Fig. 398, and, *Marg*, Vol. 4, No. 3, Fig. 12 on p. 12.) which illustrate the *Laur-Chandā* story in the Avadhī language and in which the script is Persian. These miniatures have features of the Gujarati Ms illustrations and at the same time have characteristics of their own. They are probably a North Indian variation of the Gujarati style. Did the *Laur-Chandā* miniatures of the Lahore Museum develop from some such school? The find-spot of the *Laur-Chandā* miniatures of the Lahore Museum is not known. The find-spot of the *Chaurapañchāśikā* miniatures was Pratapgarh in Rajasthan while Mewar was the find spot of our *Gita Govinda* set.

As to the connection of these groups with the established schools of Indian miniature painting, one thing, is fairly clear, namely, that the group we are considering has developed as the result of the impacts of the Mughal school on the stereotyped indigenous forms of book illustration, whether it be the Gujarati Ms school or of some other local variation, as for instance the one represented by the *Digambara* Ms. Once we realize that the group we are considering does not pre-date 1600 A.D. then it becomes increasingly apparent that this group along with all early Rajasthani painting came into being as the result of the impact of the Mughal school on the stereotyped Gujarati Ms illustrations, and other related but equally stereotyped Ms illustrations such as the *Digambara* Ms.

Basil Gray's theory of a 16th century school of painting in Rajputana extending possibly into Central India but having nothing in common with the 'degeneracy' of the style of the stereotyped Gujarati Ms illustrations and their local variants becomes more and more untenable with each new discovery made. I had demonstrated the grave pitfalls of such a theory in my "Leaves from Rajasthan", *Marg*, Vol. 4, No. 3, but Gray reiterated his theory in "The Development of Painting in India in the 16th Century", *Marg*, Vol. 6, No. 3, seeking to refute my arguments. It is not possible in the present article to deal with the matters covered by Gray, but I would like to say that those who cannot see in the *Laur-Chandā* and *Chaurapañchāśikā* type the clear influence of the Gujarati or Jaina style Ms illustrations and that of their several local variants should carefully study the illustrations of the Jaunpur *Kalpasūtra* of 1465 A.D.; the Mandu *Kalpasūtra* of 1439 A.D.; the *Uttarādhyaṇa*

Sūtra of 1591 A.D., and the *Digambara Ms* when it is published. As to the similarities between the female facial type of our *Gīta Govinda* set and that of the *Uttarādhyayana Sūtra* of 1591 A.D., attention is invited in particular to the lady's face in Brown, *Manuscript Illustrations of the Uttarādhyayana Sūtra*, 1941, Fig. 73. There is no gain-saying the similarity in almost every detail. As already indicated by me above I do not rule out of consideration the possibility of some Deccani or Southern influence filtering northwards during the formative period of the early Rajasthani school, but the main factor in its formation and development was Mughal painting.

I want to stress that my theory is that early Rajasthani painting was the outcome of the influence of the Mughal school on the rather crude and stereotyped styles of book illustrations prevalent in Rajasthan and most other parts of the country. In the Deccan, the influence on these crude, stereotyped styles appears to have been that of Persian and Turkish painting mixed with influences from Vijayanagar. The point to note is that there was no vital local Rajasthani school (different from the stereotyped styles of Gujarati book illustration) in existence when the Mughals came to India. Basil Gray would have us believe that there was such a school and that it is represented by the *Laur-Chandā—Chaurapañchāśikā* group. It is difficult to understand this viewpoint when the Mughal influence (in technique and costume; not in spirit) stares one in the face when analysing this group. The point is best expressed by saying that though early Rajasthani painting is quite different in spirit from Mughal painting yet there would have been no Rajasthani school, early or late, had there been no Mughal school in India. The Gujarati style and its local variants would have continued long to hold the field and there would have been no *Laur-Chandā* set and no *Chaurapañchāśikā* set in the style in which we see them. But for the influence of Mughal painting the stereotyped style of the *Digambara Ms* may not have developed into the more advanced and sophisticated style of the *Laur-Chandā* and *Chaurapañchāśikā*. It may be noted incidentally that while the *Digambara Ms* illustrations are usually of small size and sometimes extending over the oblong page of the *Ms*, the illustration of *Laur-Chandā* and *Chaurapañchāśikā* are fairly large individual miniatures and are not in the usual format of Jaina manuscripts. This feature also indicates a much later date for the *Laur-Chandā* and *Chaurapañchāśikā* as contrasted with the date of the *Digambara Ms*.

The size of our *Gīta Govinda* series is 8½" x 6". Their colouring in general can be gauged by the two examples reproduced in colour which are typical. Apart from questions as to the

provenance and date, the series is characterized by that same fresh charm which one expects in early Rajasthani painting. The emphasis in this series is on trees, creepers, flowers and birds, shady bowers and the season of Spring when all nature is delightful and Cupid ranges through every forest and grove armed with the flowery bow and the shaft which if loosened awakens love in the heart of every lass and lad. Kṛishṇa, Rādhā and the *gopīs* all follow a set physical pattern, obviously derived from an earlier prototype as already indicated. They are all somewhat short and buxom creatures, with plump faces and not exactly romantic in appearance! Nevertheless this does not seem to matter. There is no doubt that the artist has infused his creations with the spirit of Jayadeva's poem. The manner in which the rather formal trees are woven into a pattern with the meandering creepers in order to constantly maintain the atmosphere of an idyllic fairy woodland, is a unique feature of this series. Though the formal round tree, so common in Rajasthani art, is present (Pl. IV, Fig. 1 second tree from left) there is quite a variety of attractive tree forms in this set. By the end of the 17th century this freedom of expression was to disappear almost entirely in Rajasthani art. As in the Basohli *Gīta Govinda* set of 1730 A.D., one miniature illustrating the lines of Canto III, 7, is a pure landscape scene without any human figures (Pl. II, Fig. 2).

Each miniature has a line from the *Gīta Govinda* on the top margin of the yellow border.

Pl. I, Fig. 1; Museum No. 54.43

The Heroine waiting for the Hero at the trysting place in a woodland. On the left two parrots are about to alight on a tree. On the right two cranes are seen in flight. The Heroine is anxious and slightly agitated. Note the long transparent *jāmā* of the Hero. It is not of the *chākdār* type. One would hardly expect such a long *jāmā* in the first quarter of the 17th century. The Hero holds garlands for the beloved. Note the Hero's slippers and compare with the slippers worn in the *Chaurapañchāśikā* set. They are different. The peculiar marks on the bottom border should be noted. Somewhat similar marks are seen in the *Chaurapañchāśikā* set. Translation of text: In spring, young flowering *karuna* trees, look smilingly at those melting with shyness, and spearheaded *ketaka* boughs point to the quarters, threatening to pierce as it were lovers in separation. In the sapient (juicy) spring Hari wanders.

Pl. I, Fig. 2; Museum no. 54.41

Kṛishṇa embracing Rādhā in a woodland bower. A flight of cranes is seen overhead. Rādhā wears black pompons on the armlets and bracelets, and also at the waist. Her plait is also tied at the end with a pompon. Translation of text:

A cowherdess passionately embracing Kṛishṇa with her swelling breasts, coos the *panchama* raga. Hari wanders in the sapient spring.

Pl. II, Fig. 1; Museum no. 54.37

A lady and her *sakhī* conversing in a garden. The pillow suggests it is a garden and not the woodland. Note the wiry strands of hair and the end of the plait of the lady on the left. Translation of text:

My mind counts his endless virtues, refuses to be perturbed even by mischance, it gains satisfaction and avoids finding fault from afar. Though Kṛishṇa, without me, dallies with the girls, my wayward mind desires him. What am I to do?

Pl. II, Fig. 2; Museum no. 54.44

Note the absence of human figures. Also note the design of water, lotuses, and ducks (or water birds) on the bottom border. This design is seen in the *Laur-Chandā* set and in French's *Rāginī*. Translation of text:

In spring, the blossoming mango thrills to the tender embrace of *atimukta* creepers, the woodland of Vrindāvana is purified by the waters of the skirting Jamuna river; Hari wanders in the sapient spring. The purpose of this description of the charming spring-time woodland, permeated with manifestations of love, is to recall the memory of Hari.

Pl. III, Fig. 1; Museum no. 54.45

Kṛishṇa surrounded by *gopīs* in a garden or woodland. Parrots have alighted on the trees. Note that the *gopī*, third from left, wears a long piece of ivory horizontally placed through the lobe of the ear. This is seen in the *Chaura-pāñchāsikā* and *Laur-Chandā* sets. Translation of text:

The confidante again spoke to Rādhā, pointing to Kṛishṇa standing nearby, thrilled by the embraces of his lady-loves, and eager on further dalliance.

Pl. III, Fig. 2; Museum no. 54.40

Rādhā sleeping on a bed of lotuses in the forest. Note the ivory ornament through the lobe of the ear as in Pl. III, Fig. 1. Translation of text:

She prepares a flower bed, full of seductive charms and made of flowers like the heads of the God of Love's arrows performing a rite, as it were, for the pleasures of your embrace.

Pl. IV, Fig. 1; Museum no. 54.42

Kṛishṇa and Rādhā embracing in a garden. Note the ear ornament seen in Pl. III, Fig. 1. Kṛishṇa wears flowers standing up from his hair instead of the peacock plume seen in Colour Plate A. Translation of text:

I remember Hari, his jests and his dalliances. I remember his desire to kiss the full hipped cowherdess. I remember his lips, sweet as *bandhujīva* flowers on which played a tender smile.

Pl. IV, Fig. 2; Museum no. 54.46

Kāliya Damana. The Nāginīs are imploring Kṛishṇa not to kill their wicked husband, the Nāga Kāliya. On the banks are the frightened *gopas* and *gopīs*, but they appear as if they were standing in the water. Kṛishṇa wears a six pointed *chākdār jāmā*. The six jointed *jāmā* is seen even as late as 1648 A.D. in one of the miniature of the *Bhagvata Purana* painted by Sahabadi. Translation of text:

Victory to thee, O Hari, Subduer of the venomous Kāliya, delight of the populace, Sun of the lotus of the Yadu clan.

Colour Plate A; Museum no. 54.39

Kāma (Cupid) shooting his arrow at Kṛishṇa and Rādhā. On the left we see the meeting of the two lovers and later they are in an embrace when Kāma shoots his arrow at them. Kāma wears the four pointed *chākdār jāmā*, and the turban with *kulāh*. The turban has the narrow ribbons at the rear so characteristic of Akbar period *aṭpāṭī* turbans. Kṛishṇa also wears the same kind of turban but without *kulāh*. Translation of text:

She detests sandal paste, and regards the zephyr breezes touching it as deadly venom; the moonlight scorches her, O Mādhava, and fearing the darts of Kāma, she seeks

asylum by merging herself in you. Separated from you, she wastes away.

Colour Plate B; Museum no. 54.38

Rādhā seated in a garden pining for Kṛishṇa. The bower on the right is empty. Her lover has not kept his promise to meet her. The peculiar marks on the bottom border observed in Fig. 1, are seen here again. Translation of text:

When swarms of bumble-bees settle on flowers that cluster silently on *bakula* stems in spring, the women of wayfarers intoxicated with love-longing bemoan their fate.



Rādhā pining for Kṛṣṇa. Early Rajasthani school, c. 1610 A. D.

उन्मदमदनमनोरथपणिकवधजननिताविलोपे। अलिकुलसंकुलकुसुमसमूहनिश
 ॥ कुलबकुलकलापे ॥ वि० ॥ २ ॥

-स. ३. प. २



THE FIRST NATIVE INDIAN CIVILISATION

S. N. CHAKRAVARTI

Until 1921 the Aryans were believed to be the creators of Indian civilisation. Research into the *Vedas*, the early literature of this remarkable people, has shown that they possessed a highly advanced civilisation, which in the light of the inscriptions at Boghaz-köi,¹ can be dated to about 1500 B.C. Its principal home was in the plains of the Indus and its tributaries, once the Land of the Seven Rivers, called *Sapta Sindhava* in the *Vedas* and "*Hapta Hindava*" in the *Vendiad*, and it was regarded as the source of all the subsequent civilisations in India.

The Aryans entered India from the north-west and occupied the valleys of the Indus, Ganges and Jumna. These river valleys have yielded many remains of the historic age, though as yet no sites or monuments have been discovered that are definitely attributable to the Vedic Aryans. In the absence of archaeological evidence, it was supposed that India had possessed no civilisation worthy of the name until the coming of the Aryans. This view was adhered to because the only ancient remains found in the land consisted of palaeolithic and neolithic implements. Besides, the Vedic literature tells us a little about the older inhabitants of the land, whom the Aryans regarded with contempt and fear, fit to be either exterminated or enslaved.

In 1922 came the wonderful discoveries made by R. D. Banerji at Mohenjodaro on the Indus in the Larkana District of Sind. Banerji discovered a foot or two below the ruins of a Buddhist *stūpa* and monastery of the 2nd or 3rd century A.D. earlier ruins that yielded relics, such as seals of soap-stone, flint scrapers and cores, and painted pottery vessels, that had no parallels among the antiquities of the Mauryan or subsequent periods. The seals were engraved with fine representations of animal figures, mythical and real, and a short record inscribed in a sort of pictorial writing. Similar seals had been discovered by General Cunningham in 1872-73 from an ancient ruin at Harappa on the Ravi in the Montgomery District

1. The inscriptions at Boghaz-Köi, the Hittite capital in Asia Minor, written on clay tablets in Cuneiform script, include records of treaties concluded between the king of the Hittites and the king of Mitanni at the beginning of the 14th century B.C. The gods of both kingdoms are invoked as guardians of the treaties; and in the list of Mitanni gods there appear the names of *Mitra*, *Varuna*, *Indra* and the *Nāsatyau* (the two *Ásvins*), gods who are also common to the ancient Indian pantheon as recorded in the *Rigveda*.

of the Punjab, but the age of the civilisation represented by the Harappa site continued to remain a mystery. Banerji for the first time recognised that the earlier ruins at Mohenjodaro antedated the Buddhist ruins by two or three thousand years.

The effect of the discoveries at Harappa and Mohenjodaro was startling. The story of civilisation in India was extended backwards by 3,000 years; in the Indus valley flourished a fully literate and very advanced civilisation fifteen centuries before the supposed date of the Aryan invasion. Before the discoveries made at Harappa and Mohenjodaro the civilisation of the pre-Aryan people of India was considered to be greatly inferior to that of the Vedic Aryans, but now this view underwent a radical change. To quote Prof. V. Gordon Childe:² "After the historical daylight of the brilliant Harappa age twilight descends upon the Indus valley. From the archaeologist's standpoint the Aryan *rishis* sang their Vedic hymns out of a prehistoric night."

Both sites, Harappa and Mohenjodaro, were subsequently excavated under the direction of Sir John Marshall. The discoveries opened a new world to the historian; the Indus valley came to be considered as part of the civilised world of the 3rd millennium B.C. along with the Nile valley in Egypt and the Tigris-Euphrates valley in Mesopotamia. The civilisation was first called Indo-Sumerian because of the close resemblance of its antiquities to certain Sumerian antiquities from Southern Mesopotamia. It was later discarded in favour of the term Indus; the civilisation revealed at both sites being specifically Indian. But Harappa and Mohenjodaro are not the only sites where remains of the ancient Indus civilisation have been discovered, for there are other contemporary or earlier sites in the Indus valley. Indeed, the civilisation revealed at these two sites illustrates only one phase in a long cultural evolution. Accordingly, the term Indus civilisation has been reserved for the whole cycle. The phase of it known from Harappa, Mohenjodaro, Chanhudaro and kindred sites is designated the Harappa period after the site where it was first discovered. Remains of a different and earlier culture were disclosed at Amri beneath the ruins of Harappa age by N. G. Majumdar.³ Later phases of the Indus civilisation have been established by Dr. E. Mackay's⁴ excavations at Chanhudaro, though the principal period at Chanhudaro is the Harappa. The Harappa culture was succeeded by the Jhukar and Jhangar cultures, so named after the sites where they were first

2. V. Gordon Childe, 'India and the West before Darius', *Antiquity*, Vol. XIII, 1939, pp. 5 ff.

3. N. G. Majumdar, "Explorations in Sind," *Memoirs of the Archaeological Survey of India*, No. 48.

4. E. Mackay, *Chanhudaro Excavations*, 1935-36, American Oriental Series, No. 20.

determined by Majumdar. They were found in stratified order, the Jhukar above the Harappa and the Jhangar above the Jhukar. The Amri period is not represented at Chanhudaro, though it might exist deep below the water-level.

The best known phase of the Indus civilisation is the Harappa period. Cities of this period have been found to stretch from the Indus delta to the middle Punjab. At all sites a cultural homogeneity reigns in architecture, metal-work, pottery, jewellery, religious symbolism and artistic styles. The nine building levels at Mohenjodaro undoubtedly represent a considerable period of time. Yet, no significant changes in culture are found from top to bottom of the deposits. A Harappa settlement has also been found near Rupar, on the Sutlej, not far from the Simla hills. The area embraced by the Harappa culture is much larger than either Egypt or Sumer. This bespeaks of its antiquity and its pottery as a civilising force. But its origin is uncertain. So far its foreign derivation has been stressed.

The ruins of the Harappa period disclose populous cities. The houses were mostly built of kiln-fired bricks, flat and oblong and thus far more practical than the sun-dried plano-convex bricks (*libn*) used by the Sumerians. Among the buildings of Harappa, Mohenjodaro and Chanhudaro, no structure has been discovered that can definitely be identified as a temple; the cities were built for men, not gods. Life had a democratic flavour; there seems to have been no very glaring contrast between the status of the different classes. In Egypt and Sumer the social structure was different. In ancient Egypt it was believed that the king was begotten of God. He was so revered that the people did not mention him by name, but spoke of the palace in which he lived, that is, Pharaoh, which means, in Egyptian, "Great House". In Sumer, the land of small city-states, the authority was vested in the chief deity of the city-state, that is, in the *patesi* or chief priest of the temple, as the God's direct representative on earth. The rich furnishings of the royal tombs of the Pyramid Age of Egypt (about 30th to 25th century B.C.) reveal to us the luxuries surrounding Egyptian royalty and the tomb walls give us pictures from the actual life of the land-owning courtiers and of the servile and semi-servile workers. The common folk of Egypt in the Pyramid Age, whether free men or slaves, did not own any land. Over them were the landowners, the Pharaoh and his feudal nobles. Yet, as early as the third millennium B.C. Egyptian maxims concerned themselves with fair dealing for the humble members of society. In Egypt the gods were there to serve men and the Egyptian also shared with the Pharaohs

in the privileges of the after-life. In Sumer, however, man was created as servant of the gods, and he was ever conscious that life was not ordered for his benefit. The Royal Tombs at Ur, dated to about 2,500 B.C., had rich furnishings, and also contained the dead man's bodyguard, his male and female servants, his draft oxen still yoked to the chariot, all lying slain at the door of the burial chamber, that they might serve him after death. In essence, in Egypt and Sumer there was no political liberty of the individual. In the Indus valley, however, nothing in the material remains indicates the concentration of wealth and authority.⁵

We may quote here the most informative conclusions drawn by Prof. Childe from the building ruins of the Harappa period. "The amount of wood consumed in burning these millions of bricks is appalling. Such consumption would be unnecessary and impossible today. It affords eloquent testimony to the size of the communities concerned and the resources at their disposal. Yet nothing in the ruins indicates the concentration of this wealth. In Mesopotamia the most conspicuous ruins are those of temples; they reveal as clearly as the written texts the role of the city deity as the great capitalist. The pyramids and *mastabas* of Egypt tell the same tale of Pharaoh and his feudal nobles. No such monumental buildings catch the eye in Indus cities. At Mohenjodaro the most imposing single complex is a great bath. We can distinguish between the slummy dwellings of artisans and the more spacious houses of prosperous merchants—proletariat and a bourgeoisie perhaps, but not a narrow oligarchy of high finance nor landlords, monopolists by birth."⁶

Mohenjodaro and Chanhudaro were twice overwhelmed by the Indus flood. In the case of Mohenjodaro a flood took place early in its history and another at the period of its decline. On both occasions the city was rebuilt, but following closely the plans of the old, thus attesting that some definite authority controlled the development of the city. At Mohenjodaro we find a planned city. It was the creation of clear thinking and careful organization, not of chance. Its streets, unlike the streets of ancient Ur and Kish meandering vaguely, ran in parallels from east to west and from

5. For the Sumerian society see C. L. Woolley, *The Sumerians*. See also M. E. L. Mallowan's review article, "The Intellectual Adventure of Ancient Man", *Antiquity*, No. 83, September 1947, pp. 116 ff.

6. Dr. Mackay found at Mohenjodaro and Dr. R. E. M. Wheeler at Harappa a central mass of buildings among the ruins, which they regard as a sort of acropolis or citadel and the stronghold of a bureaucratic or priest-king régime, very similar in type to the contemporary theocracies of Sumer and Akkad. See R. E. M. Wheeler, "Harappa 1946: the Defences and Cemetery R 37", *Ancient India*, No. 3, 1947, pp. 76-77; E. Mackay, *Further Excavations at Mohenjodaro*, Vol. I, pp. 4, 5, 143, 648.

north to south. They crossed one another more or less at regular intervals and strictly at right angles, and nowhere a building encroached upon the public highway. In ancient Sumer there appears to have been no such strict surveillance. At the latest levels of Mohenjodaro streets and lanes were no doubt built upon in disregard of the original layout. But these levels mark the period of Mohenjodaro's decline.

The Harappa civilization rests upon the same fundamental ideas, discoveries and inventions as the Sumerian. But the two fully fledged civilizations elaborated their common elements along divergent lines.

The Harappans and the Sumerians discovered the wheel. But the form of the vehicle was different. The metalsmiths in the two regions used similar processes, but produced different types of tools and weapons. The same ceramic techniques were used, such as red wares, grey wares, reserved slip wares,⁷ but the forms were different. Both peoples invented writing. But the scripts differed. Besides, the Harappans used rectangular stamp seals, the Sumerians cylinder seals.

Evidently, the growth of civilization in the Indus valley was not influenced in any way by the sister-civilization in Mesopotamia. But the age of the Harappa civilization is still uncertain. Seals of the distinctive Harappa type and made of glazed steatite have been found at several sites in Mesopotamia. Seventeen were found at Ur alone. But not one of these seals was properly dated by the circumstances in which it was found. At Tell Asmar (ancient Eshnunna), however, Dr. H. Frankfort,⁸ found in a well defined archaeological stratum, dating from the Sargonid period (2500 B.C.), a cylinder seal of Mesopotamian form but engraved with Indian animals, the elephant, rhinoceros, and *gharial* (fish-eating crocodile), quite in the Harappa style and made of glazed steatite, and kidney-shaped inlays, knobbed pottery and etched carnelian beads such as were common in the Indus valley in Harappa times.

There are also Mesopotamian imports in India. A fragment of a vessel of light-green steatite has been found in an early level at Mohenjodaro, carved with mat-pattern which occurs on vessels at Tel Asmar and Kish in Mesopotamia and Susa in Persia. Three cylinder seals have been found at Mohenjodaro in the upper levels

7. The technical name reserved-slip is given to vases showing a light slip laid over the dark body-clay and then wiped off again in streaks so as to produce a pattern of alternate dark and light bands.

8. H. Frankfort, 'The Indus Civilization and the Near East'. *Annual Bibliography of Indian Archaeology* (Kern Institute, Leyden), 1932, pp. 1 ff., Pl. I.

of the city. Their form is Mesopotamian, but the technique and the themes are Indian. The favourite Sumerian motive of a hero between two beasts is represented in a seal from Mohenjodaro; the stone is Indian and Indian tigers replace the Mesopotamian lions. A vase from Tell Agrab depicts in a truly Sumerian milieu an Indus cult with the bull and manger as on Indus seals. The copper toilet-sets from Harappa and the squatting monkey in glazed frit from Mohenjodaro recall the gold toilet-sets and the monkey in glazed frit found in the so-called 'Royal Tombs' at Ur. The Harappa toilet-sets may point to Mesopotamian influence, while the Ur monkey is attributable to Indian influence since the monkey is, and has always been, unknown in Mesopotamia.

Lively intercourse in ideas and concrete objects between India and Mesopotamia during the Sargonid period is unimpeachably demonstrated. But this evidence does not necessarily place the beginning of the Harappa culture in the Sargonid period. The Indian exports in Mesopotamia leave no doubt that the Harappa civilization was flourishing before 2,500 B.C. But how much earlier it began and how much later it ended still remain to be solved.

Here, it is necessary to refer to the classic sequence of prehistoric and Early Dynastic Mesopotamia. In Mesopotamia, five prehistoric stages before the Early-Dynastic period have been established. The earliest is the *Sakjögözü*, or Neolithic period. The sequence is as follows: (1) The *Sakjögözü*, or Neolithic period. Stone tools. Pottery ornamented with incised lines. From 5,000 B.C. (2) The *Halaf-Samarra* period. Some use of copper. Polychrome pottery. From 4,500 B.C. (3) The *Obeid* period. Some use of copper. Pottery ornamented with geometric designs in black. Absence of writing. From 4,000 B.C. (4) The *Uruk* period. Polished red and grey pottery. Cylinder seals and writing in the form of a pictographic script developing into a cuneiform first appear. From 3,500 B.C. (5) The *Jemdet Nasr* period. Polychrome pottery. Writing develops into a fully fledged cuneiform. Before 3,000 B.C. (6) The *Early Dynastic*, or Archaic Sumerian period. Climax of development in architecture, sculpture and metallurgy. Monuments attributable to historical names mentioned in the early king-lists. from 3,000 B.C.

As suggested by trade contacts, the Harappa civilization reached its peak in the Sargonid period, 2,500 B.C. But the common traditions between the Harappa and Early Dynastic civilizations must go back to a remote past and may be relegated to the fourth millennium B.C. or earlier.

The excavations of Sir Leonard Woolley⁹ at Atchana-Alalakh have brought out an interesting point. In his preliminary report, it is stated: "There is, indeed, especially in the pottery, both plain and painted, astonishingly little change between Level VIII and Level XVI; the material evidence shows that for 1,500 years or more, while Alalakh grew in size and wealth, there was no violent break in the continuity of history."

Atchana-Alalakh provides an interesting parallel to Mohenjodaro. The considerably longer duration of the Harappa phase is implied by the nine building levels at Mohenjodaro. Besides, as at Alalakh, practically no significant changes in culture are found at Mohenjodaro from top to bottom of its deposits.

It is usually regarded that the Sumerians arrived at the valley of the Twin Rivers in the course of the Uruk period since the Uruk civilization shows many close resemblance to that of the Historical Sumerians¹⁰ in the introduction of cylinder seals in place of the earlier stamp seals and first appearance of writing. The Harappa civilization in the Indus valley marks precisely the same step forward as the establishment of the Early Dynastic or Archaic Sumerian period in Mesopotamia. Thus the beginning of the Harappa civilization may be placed in Uruk times, about 3,500 B.C. The question arises, were India and Sumer overrun by the same culture at what corresponds to the Uruk phase, or was one of them an off-shoot of the other, or were the two civilizations developed independently?¹¹

As has already been stated, an earlier stage of the Indus civilization has been disclosed at Amri by Majumdar. The remains of the Amri culture have been found beneath the ruins of Harappa age. In the upper levels of Trench 1 Majumdar found the typical black-on-red Harappa pottery. In the same trench, at a depth of 6 feet, he came upon a darker soil, unlike that of the upper levels, a new type of pottery with decorations in black and chocolate or reddish brown on a slip or wash of buff or light red. The bichrome pottery of Amri, which differs from the black-on-red monochrome pottery of Harappa in technique and decoration and in type, is thin and bears geometric patterns only, while the monochrome pottery is thick and decorated in most cases with geometric, animal and plant

9. For Sir C. L. Woolley's work at Atchana-Alalakh see E. Mackay, *Early Indus Civilizations*, p. 157.

10. E. A. Speiser, 'The Beginnings of Civilization in Mesopotamia', *Antiquity*, Vol. XV, 1941, pp. 162 ff.

11. As already pointed out by Mackay, the Harappa pottery shows the closest resemblances to the Uruk ware, suggesting some connection between the Harappa and Uruk cultures. He, however, thinks that while one branch of the Uruk peoples entered Sumer, another came to India. E. Mackay, *Further Excavations at Mohenjodaro*, Vol. I, p. 668.

devices combined, geometric motifs rarely occurring by themselves. The designs on the bichrome pottery have correspondences with decorative motifs on Obeid pottery in Mesopotamia.

The bichrome pottery, first discovered at Amri, was found also at Pandi Wahi, Ghazi Shah and other sites in Sind by Majumdar. At Pandi Wahi Trench I yielded, from the top, black-on-red pottery with a sprinkling of bichrome pottery. As the vertical shaft of the trench went down there was noticed a distinct paucity of the black-on-red pottery and a great profusion of the bichrome pottery was alone found. At Ghazi Shah black-on-red pottery was found mingled with the bichrome pottery at the lower levels.

The intersecting circle is by far the most popular decoration on the painted pottery of Harappa and Mohenjodaro. This decoration occurs also on some sherds of the bichrome ware of Amri. Thus Amri bichrome ware may well prove to be in the direct line of ascent to Harappa monochrome pottery. It would thus appear that the same people from more matter of fact and utilitarian point of view abandoned the thin bichrome pottery for the thick monochrome pottery. An interesting parallel is found in the Harappa period itself. At Mohenjodaro, where extensive operations were carried out, the painted pottery specimens were few in number as compared with the unpainted or plain pottery. In fact, painted pottery was more frequent in the lower than in the upper levels, thus attesting that the practice of decorating household pottery with painting was gradually abandoned.

The Harappa phase of the Indus cycle was replaced by a different culture. At Chanhudaro Mackay distinguished a sequence of five occupation levels, of which the earliest three represented the Harappa culture, the fourth of the Jhukar and the fifth and latest of the Jhangar culture. The Jhangar culture marks a break with the old painted pottery traditions in having a grey or black ware with incised decoration and is, therefore, to be assigned to a very late period. The Jhukar economy was urban. The black-on-red technique was continued, but in a modified type. A noteworthy feature is the reappearance of the bichrome style, but widely differing from the earlier phase in type as well as design. The characteristic rectangular seals of the Harappa culture are replaced by round bead seals of baked clay and a few button seals of stone. They are decorated not with lively pictures of animals but with geometrical designs recalling those current on the Iranian plateau in the first settlement at Tepe Hissar near Damghan. The Jhukar pin with double spiral head recalls the type found at Anau in Turkestan and in the second and third periods at Tepe Hissar. Another charac-

teristic product of the Jhukar culture is the bronze socketed axe. A bronze socketed axe-adze was also found at Mohenjodaro in the debris overlying the Harappa ruins. The Mohenjodaro specimen is identical in form with the specimens from Tepe Hissar.

From the excavations at Chanhudaro it appears that the Jhukar people occupied Mound II at Chanhudaro after it had been deserted by the Harappa people. Indeed, they took up residence in some of the deserted houses of Harappa I period, after raising the walls in many cases with generally indifferent masonry constructed with Harappa bricks. And, from what has been mentioned above, they had a well defined culture of their own. Evidently, we are dealing here with a new people. Their material remains, as pointed out above have resemblance to those of the highland of Iran. Are we then to identify the Jhukar people with the Aryans? If so, their appearance was not the herald of a higher civilization than the native Indian culture.

A foreign derivation of the Indus civilization is generally stressed. So far two phases of the Indus civilization are recognized. They are Amri and Harappa. The earliest is the Amri phase. The Harappa phase of the Indus civilization has a distinct stamp of individuality and its essentially Indian character cannot be denied. So it cannot be said at once that the Harappa people came from outside India. Whatever be their ultimate origin they must have settled in India for a considerable period of time.

Of the Amri culture, we know but little. Its pottery differs from the Harappa ware and thus may be the work of a different people and no doubt from outside India. But there is some evidence to show that the Amri culture was not the creation of foreigners but of an indigenous people. In that case the Amri people would appear to have finally evolved the high culture of Mohenjodaro and Harappa.

At sites representing the two phases of the Indus civilization were found long thin blades and conical cores of chert. Now, in Sind, at Rohri and Sukkur, similar stone tools were found. Along with the tools of Rohri and Sukkur were found also axe-like implements and cores. The combination of so many techniques suggests that the stone industries of Rohri and Sukkur were very late, and the similarities in typology and state of preservation of thin blades and conical cores with the stone tools of the Amri and Harappa phases indicate that the two finds cannot be far removed in age.¹²

12. H. De Terra and T. T. Paterson, *Studies on the Ice Age in India and Associated Human Cultures*, 1939, pp. 331 ff.

Thus, the Rohri-Sukkur phase of the Indus civilization may be assigned to the Sakjagözü period (5,000-4,500 B.C.) of Mesopotamia and the Amri to the Halaf-obeid (4,500-3,500 B.C.). The beginning of the Harappa phase is placed in Uruk times, about 3,500 B.C. It probably lasted as late as 1,500 B.C., the conventional date of the Aryan invasion. But while in Mesopotamia many ethnic elements contributed to the final product which was handed over to the people of the Early Dynastic times, in the Indus valley the continuity in the material culture was based on a similar ethnic continuity.

We shall now turn to another region in North-West India, the highlands of Baluchistan, where prehistoric settlements have also been discovered. The surroundings in Baluchistan are essentially un-Indian. The general outlook resembles that of the Iranian plateau. Rugged, barren mountains alternate with arid deserts and stony plains. But this is redeemed in places by level valleys, in which irrigation enables cultivation to be carried on.

The more important prehistoric settlements in Northern Baluchistan are Periano-Ghundai, Moghul-Ghundai, Kaudani, Rana-Ghundai, Dabar-Kot, and Sur-jangal. Those in Southern Baluchistan are Nal, Mehi, Nandara, Kulli, Shahi-tump and Suktagendor.¹³ All the cultures are barbaric; they have yielded no evidence of writing nor of a self-conscious art. They are provincial; they developed in comparative isolation one from another into clearly defined local cultures. "Yet", as Prof. Childe¹⁴ says, "all exhibit common traits, due partly to the common environment, partly to a common cultural background, partly to mutual intercourse, and partly to the influence of the higher civilization of the Indus valley which affected all."

Common features between the cultures of Baluchistan and the Indus civilization are bangles in terracotta, bone and shell, figurines of 'goddesses' and of humped bulls, ceramic types such as cylindrical jars with perforated walls, beakers with a very narrow base and bowls on a high pedestal, and stone tools. Differences also exist. The Indus rectangular seals of glazed steatite with fine animal figures are absent. The female figures from Northern Baluchistan are hooded; those from Southern Baluchistan lack the hood-like Indus specimens. Differences, however, are more marked in the painted pottery. Broadly speaking, Southern Baluchistan is a buff ware province and Northern Baluchistan a red ware region. The designs are painted in black. Dabar-Kot in Northern Baluchistan

13. For the prehistoric settlements in Baluchistan see H. Hargreaves, "Excavations in Baluchistan, 1925: Sampur Mound, Mastung, and Sohr Damb, Nal," *M.A.S.I.*, No. 35; Aurel Stein, "An Archaeological tour in Waziristan and Northern Baluchistan," *Ibid.*, No. 37; and Stein, "An Archaeological tour in Gedrosia," *Ibid.*, No. 43.

14. V. Gordon Childe, *New Light on the Most Ancient East*, 1935, pp. 269 ff.

has a black-on-red pottery with designs representing a mixture of geometric, zoomorphic and plant forms, as in the Harappa painted pottery. In Southern Baluchistan various cultures may be distinguished: black-on-buff pottery in the Quetta region; buff ware of Nal with designs in black, red, yellow and blue; buff ware of Kulli with sparing use of red in addition to black paint; etc.

The pottery of Kulli and Mehi resembles the Amri ware in having the bichrome technique. Some of the ceramic remains from the two sites are characterized by simple geometric motifs as in the Amri ware. There are, again, others in which the geometric patterns are combined with stylized animal and plant motifs. This latter feature is a characteristic of the pottery of Harappa period. This seems to show that Kulli and Mehi cannot be equated with Amri. Nal and Nundara bear a family likeness to Kulli and Mehi. But Nal and Nundara have a polychrome pottery. Naturally, they appear to be later than Kulli and Mehi, the polychromy having at its background the bichrome technique. Besides, at Nal and Nundara the animal and plant forms are more stylized. Indeed, Stein's stratigraphy of certain sites in Southern Baluchistan has led him to the conclusion that the Kulli-Mehi ware is earlier than the Nal pottery; at Shahi-tump in graves dug into the occupation strata of Harappa period was found pottery of the Nal type.

The graves at Shahi-tump differ radically both in ritual and furniture from burials of the Harappa period but agree astonishingly with those of Susa I in Elam. Thus Shahi-tump in Baluchistan and Jhukar in Sind show that in post-Harappa times North-West India was in contact with the highland of Iran rather than with the Tigris-Euphrates valley. There is a definite cleavage between the cultural make-up of Harappa and Jhukar, as is evident from the pottery wares and seals. On the other hand Jhukar has affinity with the Shahi-tump grave; above the Jhukar level at Chanhudaro was found a triple vase precisely like one from the cemetery at Shahi-tump. It would thus appear that intruders from the West came to Baluchistan and reached the Indus valley. The possibility of these intruders being the Aryan invaders has to be considered.

The sum of our enquiries in Baluchistan is that provincial and barbaric settlements of the region are to be assigned to the period of Indus civilization's decay. This seems to have been confirmed by the explorations of Brigadier Ross at Rana-Ghundai in Northern Baluchistan. At the bottom of the mound on virgin soil in over fourteen feet of deposits (RG I), containing no structural remains but frequent layers of ash representing fire places, Ross found flint blades and pottery that was unpainted and not turned on the wheel, in

association with animal bones of the humped bull, domestic sheep, the ass, and most surprising and important, four teeth of the domesticated horse. In the levels above was found painted pottery, the black-on-red pottery of the Harappa type, like that found at other sites in Northern Baluchistan, such as, Dabar Kot, Moghul-Ghundai, Periano-Ghundai and Sur-jangal.¹⁵

The question arises about the identity of the authors of the first settlement at Rana-Ghundai. Now, the horse is the typical domestic animal of the Indo-Europeans. In very ancient times the Indo-Europeans began to migrate from their original home in the South Russian steppes. The earliest group of them to appear in the arena of history are the Hittites. They appeared in Asia Minor about 2,000 B.C. Another Indo-European group, the Kassites, became masters of Babylonia after overthrowing the last of the great family of Hammurabi about 1,600 B.C. The Mitannians, the Iranian group of the Aryans, the Eastern descendants of the Indo-European parent people, founded a kingdom in the great western bend of the Euphrates about 1,500 B.C. The eastern tribes of the Aryans, called the Indo-Aryans, wandered southeastward and eventually arrived in India.

The Rana-Ghundai site seems to provide us for the first time with the material remains of the Indo-Aryans. Plain pottery, in association with horse teeth and traces of hearths, is typical of RG I; the Aryans, as they appear to us in their own oldest records, the *Vedas*, were a people who rode horses and to whom the domestic hearth was the holiest of places.¹⁶ In RG II and III we see newcomers arriving at the site, building houses and making superb painted pottery of Harappa type. In RG IV painted pottery continues, but the types show a complete break from those of RG III; coarse bowls occur with painted ornament, "bold and not altogether unpleasing in a somewhat tawdry style". RG V, which has unpainted pottery with relief patterns encrusted on to its surface, shows a definite break with the ancient painted pottery tradition. Fragments of the encrusted ware of RG V type have also been found at Dabar Kot on the surface of the *tell*. Both RG III and IV settlement were burnt. Evidently, a new folk came in each of the RG IV and V phases.

There is nothing in the material remains of RG IV to show its connection with the Shahi-tump cemetery and thus its association

15. For a summary of Brigadier Ross's work at Rana-Ghundai see Prof. Stuart Piggott's *Prehistoric India*, pp. 119 ff., pp. 214 ff.

16. It may be mentioned here that horse-bones have not been found in Harappa deposits and that the Harappans had no true hearths in their homes.

with movements from the west. The present writer, however, thinks that RG I represents the first invasion by the Indo-Aryans and that RG IV, Shahi-tump cemetery and Jhukar their second and final invasion about 1500 B.C.

One more aspect of the oldest native Indian civilization remains to be considered: the gap of darkness between the collapse of the Indus valley civilization and the emergence of the Aryan incomers from legend to history. The identity of the originators of the Indus valley civilization is uncertain; we do not know whether the *Dāsas* or *Dasyus* of Sanskrit legend were in fact of the same race as the men who inhabited the great and wealthy cities of Harappa and Mohenjodaro. But there is not the least doubt that we can no longer accept the view that Vedic civilization is the source of all the subsequent civilizations in India. On the other hand that the Harappans contributed much to the sum of Indian civilization is certain; much of their culture survives in India to this day. In a water-stall at Mohenjodaro, with depressions to hold large storage-jars, the floor was found littered with broken clay cups. The custom of drinking water from clay cups and then throwing them away is still in vogue. The technique of modern potters in Sind is identical with that of the potters who made the Harappa vases and the modern village earts in Sind with solid wheels turning with the axle agree with those modelled in clay in Harappa times. And as to the religion of the Indus people Sir John Marshall¹⁷ writes that it "was the lineal progenitor of Hinduism" in some aspects, such as animism and the cults of Śiva and the Mother-Goddess. The cult of the Mother-Goddess may not be exactly the same as the Śakti-worship of later days, but certainly indicates the belief in a female energy as the source of all creation. Śiva is represented on one particular seal as seated in the *yoga* posture, surrounded by animals. He has three visible faces, and two horns on two sides of a tall head-dress. Some stone pieces have also been discovered which look exactly like a *Śiva-Liṅga*, the form in which Śiva is worshipped today.

My conclusion about the origin of the Indus valley civilization is as ambitious a claim as can reasonably be made from the evidence of archaeology so far brought to light. But we need further knowledge in many respects, both of the discoveries already made, and of many new discoveries that spade and trowel may yet bring to light. The excavations at Chanhudaro established an important sequence of cultures. But the digging was carried to water-level, not down to virgin soil. Further excavations in the Indus plains are necessary, carried down wherever possible to virgin soil.

17. *Mohenjodaro and the Indus Civilization*, edited by Sir John Marshall, Vol. I, pp. 77.

BĀHUBALĪ:

A UNIQUE BRONZE IN THE MUSEUM

UMAKANT P. SHAH

Bāhubalī, born of queen Sunandā, was the second son of the first Tirthaṅkara, Ṛishabhanātha. While his elder step-brother, Bharata, succeeded his father, and became a Chakravartin ruling from Vinītā, Bāhubalī had his capital at Takshaśilā, in the country called Bahalī.¹ According to the Digambara traditions, however, he ruled from Podanasa or Podanapura.²

Having defeated many kings, Bharata demanded homage from his ninety-nine brothers. Ninety-eight renounced the world to become Jaina monks, but Bāhubalī refused to acknowledge his brother's sovereignty. Bharata marched on his brother with a large army, but in order to avoid bloodshed they resolved that the fate of war would be decided by a duel between them. They first engaged in *drishṭi-yuddha*, gazing at each other with steadfast eyes, whoever winked first being the loser. Then came boxing, but Bāhubalī being victorious in such duels, Bharata, against the recognised laws of duelling, sought the aid of his discus—the *chakra-ratna*. Just when victory seemed certain, Bāhubalī was seized with the thought of the evanescence of the world and the utter futility of sovereignty and kingdom. Instead of crushing the opponent, he plucked off his own hair on the field of battle and became a Jaina monk. Bharata, his head bent low with shame and remorse, returned to his capital while Bāhubalī remained in meditation.³ Standing motionless in the *kāyotsarga* posture he endured cold, heat, wind, rain and thunderstorms. Wild buffaloes rubbed themselves against his body.

1. *Āvaśyaka Nirvyukti*, 322, and Haribhadra's *Āvaśyaka Vṛtti* on it, p. 147; *Āvaśyaka Chūṛṇi* (on the same *Nirvyukti gāthā*); p. 180, also expressly says that Takshaśilā was in the Bahalivishaya.
2. *Ādipurāṇa* (*Mahāpurāṇa*) of Jināsena, 35.27, vol. I, p. 174 calls it Podanasa; it is called Pautanapura in *Paumachariya* of Ravisheṇa, 4.67, p. 61, and Podana in *Harivamśa* of Jināsena, 11.78, p. 212. Kannaḍa writers follow this tradition. Also see K. P. Jaina, "Podanapura and Takshaśilā," *Jaina Antiquary*, III, (December, 1937), pp. 57 ff. His arguments, however, are not convincing. It may be noted that the *Paumachariyam*, 4.38, p. 16, says that Bāhubalī ruled at Takshaśilā, which tradition is followed by all Śvetāmbara writers.
3. Most of the texts do not mention the place where Bāhubalī stood in meditation: cf. *Paumachariyam*, 4.54-55, *Āvaśyaka Nirvyukti*, gāthā 349 and *Bhāshya*, gāthās 32-34 on it in Haribhadra's *Āvaśyaka Vṛtti*, p. 152; also *Āvaśyaka Chūṛṇi*, pp. 180 ff., *Ādipurāṇa* (*Mahāpurāṇa*), 36. 106-110, vol. II, pp. 200-220. The *Āvaśyaka Vṛtti* of Haribhadra, *op. cit.*, p. 152, and also the *Paumachariyam*, however, seem to suggest that he continued meditation on or near the battlefield. Hemachandra says the same thing. *Ādipurāṇa*, *op. cit.*, refers to his travels without a companion monk. Jināsena, however, says that he meditated for one year on Mt. Kailāsa, *Harivamśa*, 11.98-102, pp. 214.

elephants pulled his hands and feet and herds of yaks licked his body without fear. According to Hemachandra,⁴ he was surrounded completely by creepers; around his feet, buried in the mud of the rainy season, grew abundant *darbha*-grass, infested with moving centipedes, while hawks, sparrows and other birds made nests on his creeper covered body. Serpents hung from his body so that it appeared as if he had a thousand arms, and snakes rising from ant-hills at his feet clasped them like anklets.

An year passed by but Bāhubalī was unable to obtain *kevala-jñāna* due to his pride, a form of deluding *karma* (*mohaniya-karma*). His father Rishabhanātha, therefore, advised his daughters Brāhmī and Sundarī to go and instruct Bāhubalī, who now realised his mistake, and shaking off pride obtained *kevala-jñāna*.⁵ Earlier Digambara tradition does not refer to this mission of the two sisters. According to it the defilement (of pride) and dejection (*samkleśa*) which prevented Bāhubalī's attainments of the highest knowledge was removed when, at the end of one year, Bharata came and paid his respects to the sage.⁶ The *Ādipurāṇa* (*Mahāpurāṇa*) of Jinasena describes at length the penance of Bāhubalī and does not omit the account of Brāhmī and Sundarī.

This great penance of Bāhubalī inspired both the Śvetāmbara and Digambara Jainas to worship him in temples and to represent him, in the very act of meditation, surrounded by creepers and standing in the *kāyotsarga* posture.⁷ He was particularly popular with the Digambaras and the three colossal figures of Bāhubalī in South India are well-known to students of Indian art. The largest of them, about 56 feet 6 inches in height, was set up about 981-83 A.D. by Chāmuṇḍarāya at Śravaṇa Beḷgoḷa in the Mysore State.⁸

4. *Trishasṭīśālākāpurushacharitra*, I. (GOS) pp. 322-326.

5. The mission of Brāhmī and Sundarī who advised Bāhubalī not to sit on an elephant (i.e. pride) is referred to in *Vasudevahindī*, 5th lambaka, pp. 187-188, *Avāśyaka-Bhāṣya*, verses 32-37 quoted in *Avāśyaka Vṛtti* of Haribhadra, 152 ff. and the *Avāśyaka Chūrṇi*, *op. cit.* Hemachandra and later Śvetāmbara writers follow suit. But *Paumachariyam*, 4.54-55, p. 17, merely says that he obtained *kevala-jñāna* just by the force of *tapa*, Ravishena in his *Padmacharita*, 4.62-78, pp. 62 ff., follows *Paumachariyam*. *Harivaṃśa* suggests that the defilement (due to egoism) was removed when Bharata came and paid his respects to the great sage.

6. Cf. *Ādipurāṇa*, Kāshī Bhāratiya Jñāna-piṭha, 36.185-6, vol. II, p. 217.

7. *Harivaṃśa*, 11.98-102, p. 214, *Ādipurāṇa*, *op. cit.*, *Vasudevahindī*, *Avāśyaka Chūrṇi* etc., *op. cit.* All these texts show common characteristics in their descriptions of Bāhubalī in meditation, viz., creepers surrounding and entwining his limbs, snakes issuing out of the *vālmikā* or ant-hill near his legs. A Brahmanical correspondence to such rigorous austerities would be the sage Vālmiki around whom ant-hills and creepers had grown.

8. S. R. Sharma, "Jaina Art In South India," *Jaina Antiquary*, vol. I, no. 3, pp. 46 ff. Coomaraswamy, *History of India and Indonesian Art*, pp. 119, M. H. Krishna, "The Art of the Gommatā Colossus," *Seventh Report of All India Oriental Conference*, pp. 690 ff.

The second, 41 feet 6 inches high, was installed at Kārkala⁹ in 1432 A.D. while the third, 35 feet high, at Veṇur,¹⁰ was consecrated in 1604 A.D.

Images of Bāhubalī are not so common in North India, though a few medieval images are known to exist in the territory that was formerly Gwalior State and is now in Madhya Bharat, while much later bronzes are found in Digambara shrines all over India.

In the South are to be found a number of ancient sculptures of Bāhubalī at Aihole, Badami and the Jaina caves at Ellora. The later caves at Mangi Tungī and Ankai Tankai in Western India, are also said to contain sculptures of Bāhubalī.

The Aihole Jaina cave shows the nude Bāhubalī meditating in the *kāyotsarga mudrā*, with creepers entwining his hands and feet and snakes raising their hoods from ant-hills near the feet. At his sides stand Brāhmī and Sundarī dressed like princesses, and wearing crowns and ornaments. The whole upper part of the relief panel is covered with trees and the flying figures of *gandharvas* who pay homage to Bāhubalī who has just obtained *kevala-jñāna*. Bāhubalī wears a *jaṭṭā*, the hair is dressed in locks arranged across the head in almost parallel lines, and the locks fall on the shoulders. The face is slightly oval and full, the eyes are half-open and the eye-brows are raised in a gentle ridge above the surface of the forehead and not rendered by a deep incision. The figure is well-modelled, especially above the legs. The shoulders are rounded but a certain stiffness is evident here as well as in the figures of Brāhmī and Sundarī. The relief dates from about the 6th-7th century A.D.

The Jaina cave at Badami is probably somewhat later than Cave III which has an inscription of Maṅgaleśa dated Śaka 500 or 578 A.D. All the reliefs in this cave are not of the same age, a few being earlier. Of these, the panel representing Bāhubalī is noteworthy (Rambach and Golish, *Golden Age of Indian Art*, Bombay, 1955, pl. 34). His hair is dressed in the same way as in the Aihole image and the modelling is somewhat better. The two reliefs, however, belong roughly to the same age, though the Aihole figure may possibly be a little earlier.

Bāhubalī's penance became a very popular theme for representation in all of South India. At Kālūgumalai in the Tinnevely dis-

9. K. Bhujabali Shastri, "Kārkalada Gommateśvara (Hindi)," *Jaina Siddhānta Bhāskara*, vol. V, no. 2, pp. 92 ff.

10. M. Govinda Pai, "Venur and its Gommate Colossus," *Jaina Antiquary*, vol. II, no. 2, pp. 45 ff; vol. III, no. 2, pp. 52 ff.

trict are a group of Jaina reliefs in a cavern on the hill. The figure of Pārśvanātha has been recently discussed by Stella Kramrisch, *Art of India Through the Ages*, fig. 95, and assigned to the 9th century A.D. The modelling of this figure, the rendering of the eyes, etc. of Dharaṇendra and Pārśvanātha are noteworthy. In the same group of reliefs is a figure of Bāhubalī standing in meditation with Brāhmī and Sundarī at his sides, and an inscription below. The sculpture is marred by white paint and the heavy coiffeure of the two ladies is noteworthy. The same theme is repeated at Kilakkudi, Ummannamalai Hills, Madura district, and on a boulder near Samanarkoyil, Annamalai, also in Madras district.

The group of Jaina caves at Ellora contain a number of reliefs of Bāhubalī, dating from c. 8th to 10th century A.D. Of special interest is the huge, elaborately carved panel representing Bāhubalī in the last Jaina cave. Brāhmī and Sundarī stand on lotuses with long stalks, and in front of Bāhubalī (below the lotus on which he is standing) are two deer that convey the peaceful atmosphere around the sage. There is an umbrella over the head of Bāhubalī and in the upper corners are flying *gandharvas* who pay homage to him. Bharata, dressed like a king with a crown on his head and hands folded in adoration, is shown in the right lower corner. The presence of Brāhmī and Sundarī, not attested to by *Harivaṃśa*, *Padmacharita* or *Ādipurāṇa*, but known to Śvetāmbara texts, is noteworthy, while the presence of the adoring Bharata is confirmed, as noted above, by the earliest known Digambara sources.

Of the numerous representations of Bāhubalī, one of the most interesting is a beautiful image recently acquired by the Prince of Wales Museum, Bombay, and illustrated in Pls. V and VI.

The figure stands on a circular disk and is 20 inches high. A creeper, done in high relief, and consisting of meandering stems and leaves entwines his legs, thigh and arms. The hair is combed back in schematic rows, and the curled locks are placed on the back and across the shoulders. The eyebrows are raised and gently incised, the pupils are also indicated by light incisions, and the drooping ear lobes are pierced. The sharp nose is slightly hooked, the lower lip is full and sensuous, and the chin is heavy. The face itself is ovaloid, but full, and the powerful neck is deeply set. The modelling of the chest is smooth, the nipples being barely indicated, and just below the navel is perceptible a slight swelling in the abdomen. The hips are curved, the legs straight, and the knees indicated realistically. The long arms, drooping from powerful broad shoulders, follow the rhythm of the body. The palms are attached to the body by means of stays which serve to protect them

from damage. The image is also modelled from behind though not very well. The curled ends of the hair locks are placed across the back; and the buttocks are round yet small.

The modelling of this bronze figures is of excellent quality and early date. The face is radiant with spiritual energy born of deep meditation, and recalls the beauty of the Sultanganj Buddha, the Karachi Brahma and the Rishabhanātha installed by Jinabhadra at Akota. The heavy shoulders lend volume and an almost superhuman strength to the figure, but the total effect is still one of weightless spirituality, and the figure clasps firmly the ground, only to be able to raise itself more easily to the skies above. The resemblance, to my mind, to the Bāhubali image in the cave at Badami, especially in the treatment of hair, and to the 6th-7th century sculptures at Aihole, is close, and I would date the bronze image to a period not later than the 7th century A.D.*

Since Bāhubali has to be perforce represented naked in view of his rigorous austerities, and the Śvetāmbaras, on account of the growing bitterness between the two sects regarding the form of the Jina image could not reconcile themselves to the worship of a nude image, the practice of installing sculptures of Bāhubali did not receive encouragement amongst members of that sect.

In the big ceiling of the porch-like extension of the *sabhāmandapa* of the Vimala Vasahī, Dilawara temples, Mt. Abu, is represented the whole story of the battle between Bharata and Bāhubali and the latter's renunciation and penance.¹¹ Another sculpture, preserved in a cell near the great temple of Ādinātha at Mt. Śatruñjaya, represents Bāhubali standing in meditation, with legs entwined by creepers and with Brāhmī and Sundarī on either side. The sculpture, according to an inscription on the pedestal, was installed in 1391 V.S. (1234 A.D.). It may, however, be noted that both at Abu and Śatruñjaya, Bāhubali is shown wearing a *dhoti*. Sculptures of Bāhubali in Śvetāmbara temples are very rare and these are the only examples known so far.

Bāhubali is supposed to be the first of the Kāmadevas of this Avasarpinī age. According to the author of *Adipurāṇa*, he should be greenish in complexion.¹² The *Harivaṃśa* calls him *śyāmamūrti*, but compares him to *markatāchala*, i.e. rock of emerald.¹³

* Karl Khandalawala has discussed the chronology of this image in the first issue of *Lalit Kala*, and he assigns it to the 9th century A.D.—Editor.

11. See *Holy Abu* (by Muni Jayantavijaya, Bhavnagar, 1954), pp. 58-61 for a description of the various scenes in this ceiling. Almost all the figures have inscribed labels below.

12. *Adipurāṇa*, 35. verse 53.

13. Cf. *Harivaṃśa*, 11.76-102, pp. 212 ff. Also R. Narasimhachariar *Epigraphia Carnatica*, I (revised ed.), Introduction, pp. 10-18; Upadhye, A. N. *Bhāratiya Vidyā*, Vol. II No. 1, pp. 48-58.

All the images known as Gommaṭeśvara or Gomateśvara represent none other than Bāhubalī who was also called Bhujabalī, Dorbalī or Kukkuṭeśvara.¹⁴ It is not clear how the statues of Bāhubalī came to be known as Gommaṭeśvara but it seems that the Śravaṇa Beḷgoḷa colossus was the first to become famous by that name. Bāhubalī is not addressed as Gommaṭa or Gommaṭeśvara in early Jaina literature of either sect. The Beḷgoḷa image was erected by Chāmuṇḍarāya. A. N. Upadhye has shown that Chāmuṇḍarāya had another name, Gommaṭa, and was called Gommaṭarāya. This may explain why the image became famous as Gommaṭeśvara, Lord of Gommaṭa. Another explanation, offered by M. Govinda Pai, is noteworthy. Bāhubalī was extremely handsome, verily a Kāmadeva according to Jaina traditions. In Kannaḍa language, according to Pai, Gommaṭa Manmatha signifies Kāmadeva.¹⁵

Miniature paintings depicting the story of Bāhubalī and Bharata are very rare and the only one known so far is in folio 60 of the Kalpasūtra Ms, Hamsaviḷayajī Collection, Baroda, dated 1522 *saṃvat*, and published in *Jaina-Chitrakalpadruma*, fig. 181. The miniature is divided into four panels. In the uppermost, Bharata and Bāhubalī are engaged in *dyshṭi-yuddha* and *vāk-yuddha*, in the second, in *muṣṭi-yuddha* and *daṇḍa-yuddha*. In the third panel, first section, Bharata facing Bāhubalī, holds the *chakra* in one hand, while in the second section, Bāhubalī is shown with his crown falling off. According to Jaina belief, the *chakra* is unable to kill a kinsman of the Chakravartin. In the last panel, Bāhubalī, wearing white *dhotī*, stands in meditation. A tree is shown on each side, snakes entwine his hands from the ant-hill below his feet, and birds perch on his shoulders. The two Jaina nuns, Brāhmī and Sundarī, represented on the left, appeal to him with folded hands. In this miniature both Bāhubalī and Bharata are of golden complexion.

It may be noted that Bāhubalī's story is not related in the *Kalpasūtra*, but it may be argued that the text was devoted to lives of the Jinas only. The *Jambūdvīpaprājñapti* gives an elaborate account of the conquests of Chakravartin Bharata, but is silent over the contests of Bāhubalī and Bharata. The earliest known sources for us are, therefore, the *Āvaśyaka Nirvyukti* v. 349 and the *Bhāshya* verses 32-35 following it. A more detailed account, however, is supplied by *Vasudevahiṇḍī*. The date of *Bhāshya* verses

14. A. N. Upadhye, *Bhāratiya Vidyā*, vol. II. no. I, p. 48.

15. Pai, M. Govinda, "Śrī Bāhubalī kī mūrti Gommaṭa kyō kahalāti hai?" *Jaina Siddhānta Bhāskara*, IV. no. 2, pp. 102-109. For other discussions on the problem, see Mitra, K. P. *Jaina Antiquary*, vol. VI. No. 1, pp. 26-34; Shastri, H. A. "Śāntirāja" *Jaina Siddhānta Bhāskara*, vol. VII. no. 1. p. 51; Upadhye, A. N. *Indian Historical Quarterly*, vol. IV. no. 2. pp. 270-86.

is not known and we can only suggest that *Vasudevahiṇḍī* is not far removed in age from them. The *Paumachariyam* is concise and does not seem to follow *Svetāmbara* tradition for it omits to mention *Brāhmī* and *Sundarī* and only says that *kevalajñāna* was obtained through *ṭapa-bala* (power of penance). *Padmacharita* of *Ravishēṇa* says the same thing.

Bāhubalī is mentioned in another context in the *Āvaśyaka Nirukti* verses 332 ff.¹⁶ *Ṛishabha* reached *Taxila* after dusk; and *Bāhubalī* (ruling at *Takshaśilā*) thought of paying him homage next morning along with his big retinue. But *Ṛishabha* left, travelling through *Bahali*, *Aḍambailla*, *Yonaka* and preached to the people of *Bahali*, *Yonakas* and *Pahlagas*.¹⁷ Then he went to *Ashtāpada* and thus after several years came to *Purimatāla* near *Vinitā*, where he obtained *kevalajñāna*. These verses show that *Takshaśilā* was probably included in the province of *Bahali* (*Balkh-Bactria*?) in the age of the *Āvaśyaka Nirukti*. Next morning when *Bāhubalī* learnt of the Master's departure, he was disappointed and worshipping the spot where the Lord stood, he installed an emblem—the *dharma-chakra*—there.¹⁸ The *Vasudevahiṇḍī* and the *Paumachariyam* do not mention this account of the origin of *dharma-chakra* at *Takshaśilā*, installed and worshipped by *Bāhubalī*.

The *Stūpa*-base at *Sirkap*, with the double-headed eagle carved on it, was identified as a *Jaina* shrine by *Marshall*,¹⁹ but this is indeed very doubtful, for no other *Jaina* antiquity was unearthed from the site. Other writers following him regard the *stupa* base as a proof of the *Jaina* tradition that *Bāhubalī* installed the *dharma-chakra* at *Taxila*.²⁰ But it will be seen that the earliest known text referring to this tradition is *Āvaśyaka Nirukti*, the traditional date of which is not acceptable and early *Digambara* sources do not refer to this incident. The *Bṛihat-Kalpa-Bhāshya*, v. 5824, refers to the *chakra* which the commentator explains as *uttarapathe dharma-chakram*.²¹ It would, therefore be proper to defer coming to conclusions till some definitely early *Jaina* antiquities are excavated at *Takshaśilā*, *Sirkap*, or at a site near by. It can only be said that

16. *Āvaśyaka Vṛitti* of *Haribhadra*, pp. 144 ff.

17. Cf. *Āv. Vṛitti*, op. cit. p. 148.

18. Cf. *Āv. Chūṛṇi*, p. 180-81, and *Āv. Vṛitti* of *Haribhadra*, p. 147.

19. *A Guide to Taxila*, pp. 88 ff, pl. xiii: *Annual Rep., Arch. Surv. of India*, for 1912-13, pp. 23 ff., for 1915-16, 12 ff.

20. *Dr. Sukthankar* has collected the *Jaina* references to *Takshaśilā*, *Bāhubalī* and *Dharma-Chakra*, *Ann. Rep. Arch. Surv. of India*, for 1914-15, pp. 2 ff. Also see *Dr. Motichandra*, "Kuchh *Jaina* anuśrutiyā aur purātattva" *Premi Abhinandana Grantha* (*Tikamazāḍha*, 1948), pp. 229 ff.

21. *Bṛihat-Kalpa-Bhāshya*, Vol. V. p. 1536. Cf. *Sūri-Mantra-Mukhya-Kalpa* of *Merutuṅga*, *Sūri-Mantra-Kalpa-Sandoha*, (text) p. 2, 14. Of the second pīṭha, it is said that *Tribhuvanasvāminī-Devī* is the presiding *Devatā*, op. cit. p. 24. See also *Durgāpada-vivaraṇa*, in op. cit. p. 34.

sometimes in the 3rd or 4th century A.D., there was probably near Takshaṣilā, a Jaina site the origin of which was attributed to Bāhubalī, but the Jainas were probably unable to establish long standing strong-holds in the North-West (Gandhāra) and Western Punjab and if at all anything existed, it was wiped out during the Hun and Muslim invasions. There did exist a sacred spot in Northern India (*uttarāpatha*), where the *Dharmachakra* was worshipped, a place more popular with the Śvetāmbara Jainas, but its identification with the Sirkap stūpa need not be regarded as final.

The origin of the worship of Bāhubalī in Jaina Tantras requires deeper investigation. He is assigned a special *pīṭha*—the second from the centre—in the diagram of the Sūri-mantra. The mystic charm (*vidyā*) which is to be written in this circle (*pīṭha*) is known at *Bāhubalīvidyā* and is specially used for *nimittakathana*, *svapna*, etc. (fortelling and interpretation of dreams etc.)²² Bāhubalī is addressed here as *prajñāśramaṇa*, a monk who could obtain *kevalajñāna* without outside help or guidance and with the help of his own psychic powers. In later Jaina Tantras, he does not appear to have been popular and the *Bāhubalīvidyā* is known only from the Sūri-mantra.

AN ILLUSTRATED MANUSCRIPT OF THE KALPASŪTRA AND KĀLAKĀCHĀRYA KATHĀ

MOTI CHANDRA

The medieval painting of India, examples of which have survived in the wall paintings of Ellura, Madanpur and certain south Indian temples including the Digambara temple of Tirumalai, Kailāsanātha (Kāñchīpuram), and Bṛihadīśvara (Tanjore), shows clear traces of the disintegration of the ancient tradition; colour modelling, linear draughtsmanship, protuberance of the further eye into space, sharp definition of the human figure, and conventional treatment of the flora and fauna are some of its outstanding characteristics.

To this age, marked by modification of technique and expression, also belong illustrated Buddhist palm-leaf Mss from Bengal, Bihar and Nepal. They furnish us a record of artistic activity in Eastern India extending from the 9th to the 12th century A.D. Iconographic forms are constantly repeated and group compositions are scarce so that Foucher charges the style with extreme dullness. There is little doubt, however, that the restricted space of palm-leaf could hardly make for elaboration and the fine calligraphic draughtsmanship together with warm colours cannot fail to evoke our admiration.

The Western Indian School, in common with the Eastern Indian School, used palm-leaf for paintings, and the most frequent representations are of incidents from the life of the Jinas, and Tāntric gods and goddesses. The draughtsmanship of the Western School, however, is not as sure, and the figures are first modelled in colour and then outlined. The protuberance of the further eye is a characteristic feature. These difference of style may be due to the foundation of two distinct schools—Śṛīngadhara's school of Western India and Dhimana and Bitpālo's school of Eastern India. The old Western School, however, as is observed by Tārānatha, made itself felt as far as Nepal in the east and Kashmir in the north. Its influence is also apparent in the Ari frescoes of Pagan in Burma.

The illustrated palm-leaf Mss of the Western Indian School may be divided on stylistic grounds into two groups. The Mss of the first group were executed between c. 1100 and c. 1350 A.D., and

the second between 1350 and 1450 A.D. when paper displaced the palm-leaf. To the first group belong Mss of *Niśīthachūrṇi* (1100 A.D.), *Jñātāsūtra* (1127 A.D.), *Daśavaikālika Laghuvṛitti* (1143 A.D.), *Oghaniryukti* (1161 A.D.) and other texts. The illustration in the first group of Mss continues till the end of the 13th century. The subject-matter is confined to the representation of the Tīrthamkaras, gods, goddesses, monks and patrons. The appeal of the miniatures is more or less iconographic, the attitudes of the figures are conventional, the anatomy shows traces of ancient conventions, the protrusion of the further eye is not as prominent as in later works, the draughtsmanship is linear and, at times, crude colour modelling is attempted. The colour scheme is restricted, consisting of vermilion, yellow, blue, white and rarely green.¹

The second group of palm-leaf painting begins to be found, roughly speaking, with the establishment of Muslim power in Gujarat, and no Ms in this style could be dated prior to 1370 A.D. In miniatures of this group great technical and aesthetic advancements are apparent.² The draughtsmanship is flowing, episodes from the lives of Jinās are represented, attempts are made to paint details, and there is improvement in the quality and application of colours. All this advance seems to have been due to contact with Persian art. Western Indian painting was too conservative to adopt wholeheartedly Persian conventions of linear draughtsmanship aerial perspective, high finish, etc., but the flowing line, fine brush-work (as in delineating the hair strands), and the use of gold and ultramarine show Persian influence. The important Mss in this group are six miniatures of a *Kalpasūtra* dated 1370 A.D. from Ujjamphoī Dharmaśālā, Ahmadabad, forty-four miniatures of a *Kalpasūtra* in Seth Anandji Kalyanji nī Peḍhī nā Jñāna Bhaṇḍār, Idar (datable to the middle of the 14th century), and four miniatures from *Siddhahaima Vyākaraṇa* in Vakhatji Serī nā Bhaṇḍār, Patan.

It is now a settled fact that paper as writing and painting material was introduced in India on a considerable scale by the end of the 13th century, though the Ms of *Dhvanyāloka*, written for Jinachandra Sūri (1156-1166 A.D.) shows that paper was known in Western India as early as the 12th century.³ In Eastern India an illustrated paper Ms in Ashutosh Museum, Calcutta⁴ was copied in 1105 A.D. during the reign of Sihadeva, King of Nepal. Dr. Hiranand Sastri's illustrated paper Ms of the *Kalpasūtra* bears a date

1. Moti Chandra, *Jaina Miniature Paintings from Western India*, Ahmedabad, 1949, p. 32.

2. *Ibid.*, pp. 34-35.

3. *Bhāratiya-Vidyā* (Hindi-Gujarati), III, p. 242.

4. JISOA, Vol. XV (1947), p. 89.

equivalent to 1068 A.D.⁵ but this is clearly a copy of the date of some earlier palm-leaf Ms for the illustrations are of a later date.

When paper actually came to be used in Western India for painting is not known. The earliest illustrated paper Ms of the *Kalpasūtra* is in the collection of Sri Jinavijayaji and is dated 1424 V.S., i.e. 1367 A.D. It was presented by one Dehaḍa to Saṅghatilaka in 1370 A.D. The folios are narrow, following apparently the size of the palm-leaf but shorter in length. The rather crude illustrations are small, of the size usually found in palm-leaf Mss. The backgrounds are usually dull red and the use of gold is very sparing. The Asiatic Society of Bombay has a Ms of the *Kalpasūtra* and *Kālakāchāryakathā*, hitherto regarded as the earliest illustrated Ms on paper in the Western Indian style, and it is dated V.S. 1472, i.e. 1415 A.D. The size of the folios is $10\frac{1}{2}'' \times 4\frac{1}{2}''$. There are twenty-three illustrations with red background, and gold is sparingly used. A general principle, which is not infallible, laid down by Prof. Norman Brown, "for estimating the age of undated paper manuscripts may perhaps be found in ascertaining the dimensions of the page: the nearer the measurements approach those of the palm-leaf folios, the more likely the manuscript is to be of the fifteenth century rather than of the sixteenth or seventeenth."⁶ The other characteristic of the 15th century manuscript is the use of brick red background.

The illustrated paper manuscript of the *Kalpasūtra* and *Kālakāchāryakathā*, now in the collection of the Prince of Wales Museum (Museum no. 55.65) has, as will be shown later, illustrations which bear little relationship to the illustrations of paper manuscripts of the 15th century, but resemble very closely the illustrated palm-leaf Mss of Ujjamphoi Dharmaśālā *Kalpasūtrā* dated 1370 A.D., and another *Kalpasūtra* in the collection of Anandji Kalyanji nā Pedhī, Ahmedabad. It has 43 illustrations and 108 folios, each measuring approximately $3'' \times 12''$. The margins on both sides are delineated by a thick red line contained by five black lines. The blank vertical space in the centre with thick red line on either side has a red solid circle with a hole for stringing the folios. In the solid circles in the margins, the number of the folio, both in numerals and letters, is given, and the illustrations ($3'' \times 3''$) usually appear on the right side of the folio. The background is brick red and the colours used are white, red, yellow, black, green, carmine and indigo blue. Gold has been very sparingly used for accentuating certain details of costumes, ornaments, furniture and architecture. The use of

5. Hiranand Sastri, *Indian Pictorial Art as Developed in Book Illustrations*, p. 10, Baroda, 1936.

6. W. Norman Brown, *The Story of Kalaka*, pp. 21-22.

ultramarine is not to be found. In the treatment of the human figure which is marked by fine linear draughtsmanship, distortion of the later period is avoided, and the limbs are delineated with easy grace. The further eye protrudes in space, but is not so prominent as in later paper manuscripts. Similarly, undue exaggeration of the chest is avoided to a certain extent, and the hands and figures retain their natural grace, having none of the distorted appearance of later drawings. Usually men have prominent foreheads marked with V-shaped *tilaka*, *paḍol*-shaped eyes with arched eyebrow, small mouth with thin lips painted red, thin moustaches and pointed beard. The hair is tied in a knot at the nape. The figures of women are treated artistically. The forehead marked with *tilaka* is narrow, the face is roundish with double chin, the breasts full, the nose sharp and pointed and the *paḍol*-shaped eyes are elongated with collyrium. As a matter of fact this type is found in a much more developed form in a *Kalpasūtra* Ms dated 1439 A.D. painted at Mandu, and now in the National Museum, and a *Kalpasūtra* in Narasimhajī nī polnā Jñāna Bhaṇḍār, Baroda, painted at Jaunpur in 1465 A.D. and which later on served as a prototype for later Rajput painting. No attempt has been made to distinguish planes, a simpler device being adopted. The surface is divided into various panels, each panel depicting a part of the story. The artist apparently believed in careful finish and his view point is clearly emphasised in the painstaking manner in which he has shown minute details of textile patterns. As regards the treatment of nature, the water is done in basket-pattern motif, and the hills and trees painted conventionally.

Unfortunately the manuscript is not dated but looking to the size of the folios which approximates the size of the palm-leaf, and the stylistic resemblance of the miniatures with those of the palm-leaf miniatures dated 1370 A.D., it is certain that we are here treating an early Ms. Another point of interest in determining its date is the use of letters to indicate numerals. As noted by Sri Punyavijayaji the common practice in Jaina palm-leaf Mss, and to a much lesser extent in paper Mss, was to use numerals and letters simultaneously for pagination.⁷ The appearance of this practice in our manuscript also supports an early date. It could, therefore, be suggested that in all probability the manuscript was written and illustrated towards the end of the 14th century. It may also be surmised that the improved technical achievements in draughtsmanship, colour application and high finish might have been due to Persian influences which were being increasingly felt in Indian art

7. *Jaina-chitra-Kalpadruma*, pp. 61-62.

and architecture of that period. The use of carmine obtained from Kermes also indicates a Persian practice.

Description of the illustrations:

- Fol. 1. Mahāvīra. The yellow coloured Jina, wearing ornaments, is seated in *padmāsana* on a throne and attended by gods, goddesses and musicians; the lower panel is decorated with the figures of lions and elephants.
- Fol. 2. Ob: Eight auspicious objects (*asṭamaṅgala*). Starting from the upper left hand corner are mirror (*darpaṇa*), throne of distinction (*bhadrāsana*), powder-vase (*vardhamānaka*), full water-vessel (*kalaśa*), pair of fish (*matsya-yugma*), *svastika*, *śrīvatsa* and *nandyāvarta*. The drawings of the objects are carefully finished (Pl. VII, Fig. 1).
- Fol. 3. Ob: Devānandā and her fourteen dreams. Devānandā wearing a *mukuṭa*, green dotted *cholā*, purplish flowered *chādar* and blue *sārī* decorated with rosettes is lying down on her golden couch furnished with pillows. Her legs are being shampooed by an attendant; on the floor a *pāndān* and spittoon. Above the railing, the following twelve lucky dreams are represented: (1) an elephant, (2) a bull, (3) a lion, (4) the anointing of the goddess Śrī, (5) a full vase, (6) heaps of jewels, (7) a brilliant flower, (8) a banner, (9) a garland, (10) a celestial palace, (11) a lotus lake, (12) ocean of milk. The representations of the sun and the moon are omitted.
- Fol. 5. Rev: Śakra in court. The four-handed Śakra, wearing a *mukuṭa*, ornaments, blue chequered *dupaṭṭā*, and red *dhotī* decorated with meanders and circles, is seated on a throne shaded with an umbrella. A god wearing a flowered purple *dupaṭṭā* and blue *dhotī* decorated with four petalled flowers (*chauphulīā*) stands before him with folded hands.
- Fol. 7. Ob: Śakra reveres Mahāvīra's embryo. Śakra wearing a dotted purple *dupaṭṭā* and a flowered blue *dhotī* faces to the right; an umbrella-bearer is seated behind him; three gods with folded hands in the foreground.
- Fol. 9. Rev: Śakra commands Hariṇaigameshi. Śakra is seated in the centre on a covered couch, and a female *chaurī*-

bearer stands behind him; before him is seated the ram-faced god, with folded hands (Pl. VII, Fig. 2).

- Fol. 12. Rev: Hariṇaigameshi carrying the embryo. Devānandā is lying on her golden couch; the god is holding the embryo in his hand.
- Fol. 12. Ob: Hariṇaigameshi carrying the embryo. Devānandā has averted her face in sorrow.
- Fol. 14. Rev: Trīśālā and the fourteen auspicious dreams. Trīśālā lies on her golden couch and wears a green *choli* and blue *sāri* decorated with floral meander, her feet being shampooed by an attendant. Fourteen auspicious symbols in the top panels.
- Fol. 26. Ob: Trīśālā with her attendants. Trīśālā is lying on a furnished couch brooding about her dreams. She wears a light red, chequered *sāri* and green *choli* and is attended by three handmaids. Deep blue sky at the top.
- Fol. 27. Rev: Trīśālā with the baby Mahāvira. She is lying on golden couch waited on by three attendants. Ewer and *pān* box on floor. Blue starred sky (Pl. VIII, Fig. 1).
- Fol. 28. Rev: Mahāvira's lustration on Mount Meru. On the top of the golden Meru is Indra, wearing flowered light blue *dupattā* and *dhoti*. On either side stands a god holding a golden pitcher. In the top panel a bull on either side symbolising clouds; streaky blue and golden sky at the top (Pl. VIII, Fig. 2).
- Fol. 30. Siddhārtha in court. Siddhārtha, wearing purplish *dupattā* and *dhoti* decorated with rosettes and ornaments, is seated on a shaded throne with a female *chauri*-bearer standing behind him; on the right, two courtiers.
- Fol. 32. Rev: Mahāvira gives away his possessions. Mahāvira, wearing a *hamsadukūla* and attended by a female *chauri*-bearer, is giving away his ornaments to a number of Brahmans (Pl. IX, Fig. 1).
- Fol. 34. Ob: Mahāvira's initiation palanquin. The golden *vimāna* on which Mahāvira is seated is carried by four bearers. It is followed musicians (Pl. IX, Fig. 2).
- Fol. 37. Ob: Mahāvira plucks out his hair. In the top panel, Mahāvira, having divested himself of all fine clothes is

distributing them to Jaina monks. In the lower panel, on the left, dressed only in a lower garment and seated on a craggy rock, he plucks out his locks and Śakra, seated on the right, with outstretched hands is apparently in the act of receiving them (Pl. X, Fig. 1).

- Fol. 38. Ob: *Samavasaraṇa* of Mahāvīra. In the centre of the walled *Samavasaraṇa* with openings on four sides is Mahāvīra seated in *padmāsana*. Outside, in four corners, a number of animals congregated to hear his preaching. In the bottom panel, men and women with folded hands.
- Fol. 38. Rev: Mahāvīra as Siddha. Mahāvīra is seated on crescent-shaped Siddhaśīlā flanked by a tree on either side.
- Fol. 42. Rev: Birth of Pārśvanātha. Vāmādevī, wearing a purple *choli* and green chequered *sārī*, is lying on a golden couch, holding the green coloured baby, Pārśvanātha; an attendant shampooing her feet. Blue sky at the top.
- Fol. 43. Rev: (a) Pārśvanātha giving away his possessions, (b) Pārśvanātha on his renunciation palanquin.
 (a) Pārśvanātha, seated on throne, is giving away ornaments to Brahmans.
 (b) Pārśvanātha, carried on a *vimāna* by four bearers, followed by drummers and trumpeters (Pl. X, Fig. 2).
- Fol. 44. Rev: (a) *Samavasaraṇa* of Pārśvanātha.
 (b) Pārśvanātha plucking his hair locks.
 For description see Fol. 38 ob. and 37 ob.
- Fol. 46. Rev: Pārśva's austerities. On the left, Dharaṇendra rescuing Pārśvanātha from flood water by raising him up on his shoulders; on the right, Dharaṇendra and Padmāvatī with folded hands; at the top, the *nirvāṇa* of Pārśvanātha at Sammetagiri (Pl. XI, Fig. 1).
- Fol. 47. Rev: Birth of Arishṭanemi and his lustration. In the lower panel, Śivadevī is lying on the couch holding blue coloured Arishṭanemi in her arms; on the left, two female attendants with gifts. In the top panel, the lustration of Arishṭanemi by Śakra and two gods.
- Fol. 50. Rev: The picture is divided into four panels. The lower panels depict Arishṭanemi giving away his possessions and being carried away on *vimāna* by bearers. In the

upper panels, he is shown plucking his locks and attaining *nirvāṇa*.

- Fol. 54. Ob: Birth of Ṛishabhanātha; his lustration by Śakra and the gods. (a) Marudevī, lying on the couch with golden coloured Ṛishabha in her arms, wears a blue *sūrī* decorated with *sinha-sārdūla* motif. (b) For description see Fol. 47 rev. (Pl. XI, Fig. 2).
- Fol. 55. Rev: The following episodes are depicted: (a) Ṛishabha giving away his possessions, (b) being carried on *vimāna*, and (c) plucking his locks.
- Fol. 57. Rev: (a) *Samavasaraṇa* of Ṛishabhanātha, and (b) his *nirvāṇa*. In (b) he is flanked by a tree on either side (Pl. XII, Fig. 1).
- Fol. 58. *Samavasaraṇa* of Ṛishabhanātha. He is attended by two laymen.
- Fol. 59. Eleven repeated figures of Ṛishabhanātha under arches.
- Fig. 86. Ob: Kālaka and the Sāhī. On the left, Kālaka clad in white garments seated on a shaded throne conversing with the Sāhī who sits on a cushioned chair, its top decorated with daggers. The Sāhī wears a golden cap, blue *jāmah* decorated with scrolls and full carmine boots. Blue sky at the top.
- Fig. 90. Rev: King Gardhabhilla brought captive to Kālaka. On the left, Kālaka seated on a shaded throne; on the right, Gardhabhilla wearing a golden *mukuta* tie-dyed *dhotī*, and *dupaṭṭā* tied to the waist, with his hands held at the back, and led by the Sāhī who wears a domed, green *jāmah* and boots.
- Fol. 91. Rev: Kālaka conversing with two Sāhī chiefs. On the left, Kālaka on a shaded golden chair; on the right, two Sāhī chiefs. The patterns on the *jāmahs* consist of rosette and arabesque. They are armed with bows and arrows (Pl. XII, Fig. 2).
- Fol. 92. Ob: Balamitra of Bharukachchha with his wife. The king on a shaded golden throne, on the left, wears a chequered, bluish *dhotī* and *dupaṭṭā* and holds a naked

sword. On the right, his wife is seated on a *modhā*. Her hair is plaited and she wears a *choli*, *sārī* and ornaments (Pl. XIII, Fig. 1).

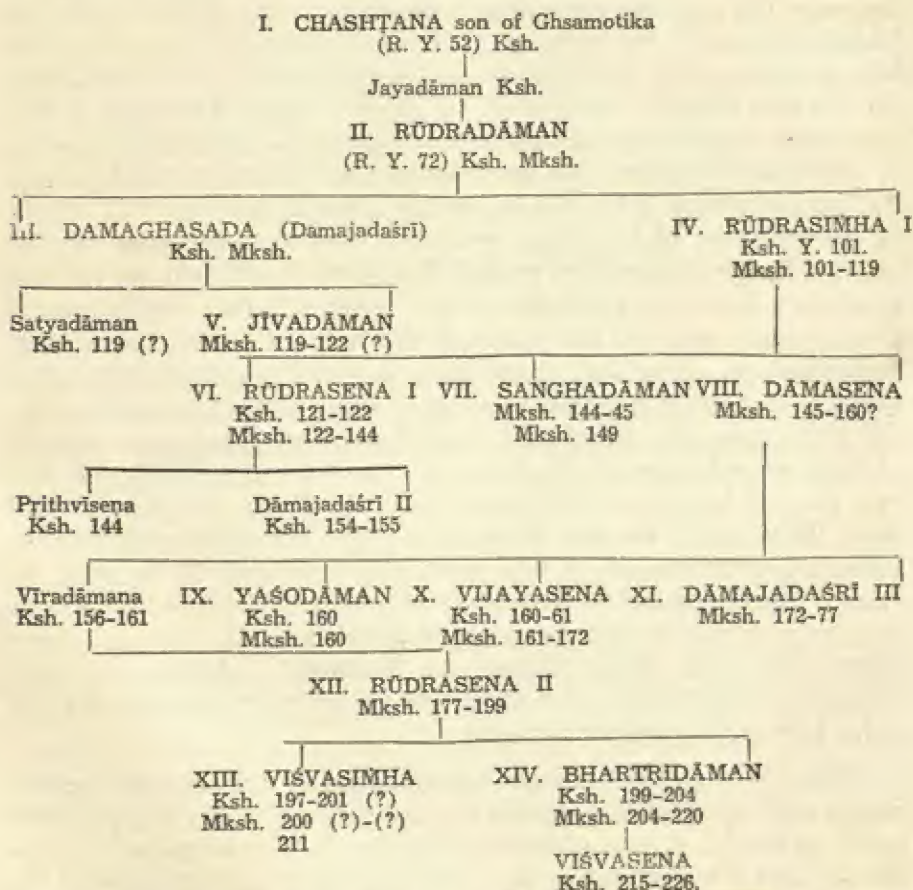
- Fol. 97. Ob: Kālaka and Śālivāhana, king of Pratishṭhāna. Kālaka on throne on the left; Śālivāhana wearing a red patterned *dhotī* and *dupaṭṭā* with folded hands on the right; in between them is the *sthāpanāchārya* of Kālaka.
- Fol. 97. Rev: Śālivāhana with his women. On the left, Śālivāhana on his umbrella-shaded throne; on the right, four women seated on cushions conversing with the king.
- Fol. 103. Ob: Three rows of Jaina *sādhus*. Each row consists of six *sādhus*.
- Fol. 103. Rev: Sagarachanda falling at the feet of Kālaka. On the left, Kālaka on his golden throne; on the right, Sagarachanda falling at his feet.
- Fol. 104. Ob: The *Samavasaraṇa* of Ṛishabhanātha. Ṛishabhanātha, seated in *padmāsana*, is attended by a worshipper with folded hands (Pl. XIII, Fig. 2).
- Fol. 106. Ob: Kālaka and Śakra in disguise. On the left, Kālaka on golden throne; on the right, Śakra disguised as an emaciated Brahman (Pl. XIV, Fig. 1).
- Fol. 106. Rev: Śakra revealed. On the left, Kālaka on the golden throne; on the right, the four-handed Indra with folded hands; in between them the *sthāpanāchārya* of Kālaka (Pl. XIV, Fig. 2).
- Fol. 108. Rev: Kālaka preaching. On the right, Kālaka on throne; on the left a *sādhu* holding a scroll, and two nuns; two laymen and a woman with folded hands.



THE KARDDAMAKA KSHATRAPAS OF WESTERN INDIA

PARMESHWARI LAL GUPTA

Of the four dynasties, known as Western Kshatrapas, the Kārdamakas¹ are the most important. They ruled for more than two centuries (c. 25 A.D. to 266 A.D.). Their entire history is exclusively constructed on the basis of their coins, which supply names of rulers, those of their fathers and also their full titles. Barring a few early rulers, the coins also furnish their dates, so that the geneology and the chronology of the dynasty can be determined with great precision. The following table gives us, in summary form the present position:



1. This family name is known from the Kanheri inscription of the Queen of Vāsishthīputra śrī Puṣumāvi, who was the daughter of the Mahākshatrapa Rūdradāman.

From the above, it is apparent that there were two sets of rulers in this dynasty; one, known as Mahākshatrapas, and the other merely as Kshatrapas. The latter title, it is believed, was that of a subordinate,² and it was held by the princes of the family while the king himself was called Mahākshatrapa. The Kshatrapas also had some ruling authority and issue of coinage in their own name was one of them.

But if we scrutinize the list of Kshatrapas whose dated coins are known, we shall see that persons holding this title are exclusively found towards the end of the reign of a Mahākshatrapa. The Kshatrapa title is held only for a very short period and the same person is soon found issuing coins as Mahākshatrapa.

Rūdrasimha I is known as Kshatrapa just before his rise to Mahākshatrapaship. His only known coin as Kshatrapa, is dated in the year 101 and the same date is found on his earliest coins as Mahākshatrapa.³ No Kshatrapa is known during the 18 years of his Mahākshatrapaship, but Satyadāman, in all probability, was Kshatrapa for a while towards the end of his reign. Again Rūdrasena I was Kshatrapa only for about two years—during the Mahākshatrapaship of Jivadāman—before his own promotion to Mahākshatrapaship. But no Kshatrapa is known during his reign of 22 years. It is only in the last year of his reign (year 144) and the beginning of the reign of Saṅghadāman that we find Prithvisena as Kshatrapa for just a while. Nothing is heard of him later. During the reign of Saṅghadāman and the early part of the reign of Dāmasena, we find no Kshatrapa. It is only in the later part of Dāmasena's reign that we have a chain of Kshatrapas for about seven years from 154 to 161, viz. Dāmajadaśrī II, Vīradāman, Yaśodāman and Vijayasena. But all of them exist in that status for a short period only. While the first two are not known as Mahākshatrapas, the latter two rose to that rank. Then, again we find Vijayasena ruling for about twelve years, Dāmajadaśrī III for about five years and Rūdrasena II for 22 or 23 years. During these 40 years, we do not find a single Kshatrapa. It is only at the end of the reign of Rūdrasena II, that we have Viśvasimha and Bhartṛidāman as Kshatrapas. Again we have Viśvasena as Kshatrapa for about five or six years towards the end of his father Bhartṛidāman's reign.

Thus it is quite clear that the Kshatrapas did not rule concurrently with the Mahākshatrapas for the entire period. On the other hand, probably, it was customary among the Kārdamakas to confer the title of Kshatrapa on the heir-apparent towards the end of the

2. BMCK, intro. c-ci.

3. See *supra* p. 35.

rule of a Mahākshatrapa, the authority of issuing coins in his own name also being given to him. This title was perhaps conferred at a time when the end of a Mahākshatrapaship was apprehended in the near future. This is borne out by the fact that some of the princes became Mahākshatrapas straightaway, without being Kshatrapas, this only showing that their predecessors died suddenly, being thus unable to appoint a formal heir-apparent. Those who were made Kshatrapas, held that post for a very short period, and were soon raised to Mahākshatrapaship. Coins of most of them, e.g. Rūdrasimha, I, Rūdrasena I, Prithvīsenā, Yaśodāman, Vijayasena, belong only to the years which coincided with the terminating years of the contemporary Mahākshatrapas.

A perusal of the list of Mahākshatrapas shows that except for a few earlier rulers, coins give the precise dates of the beginning and the end of their reigns, and almost every year of their rule is represented by coins, with only a few gaps, yet to be filled up.⁴ The chronology based on these dates clearly shows that the succession among the Mahākshatrapas was not from father to son, but was in descending order of lineage. We find that after Chashtāna, his grandson Rūdradāman I succeeded him as Mahākshatrapa and after him, the succession went to two of his sons Dāmajadaśrī I and Rūdrasimha I, one after the other (elder first). When the line of his son was exhausted, the throne passed to his grandson Jivadāman, the son of the eldest son Dāmajadaśrī I. And after him it went to the three sons of his second son Rūdrasimha—Rūdrasena I, Saṅghadāman and Dāmasena, one after the other. After them the succession passed to the three sons of Dāmasena—Yaśodāman I, Vijayasena and Dāmajadaśrī III. After them Rūdrasena II, who was their cousin and son of their elder brother Viradāman, who had died before being a Mahākshatrapa, came to the throne. From Rūdrasena, the crown passed to his two sons Viśvasimha and Bhartridāman.

These two basic facts about the family of the Kārdamakas have not been properly realised, and their history, therefore, has not been viewed in its proper perspective. Also, fresh material has come to light since Rapson compiled his *Catalogue* in 1908, and it becomes necessary to review the history of this important dynasty.

4. Following are the dates, which are not known as yet from any source:

1. Mahākshatrapa Rūdrasimha I, 102, 107, 108, 111.

2. Mahākshatrapa Jivadāman, 121.

3. Mahākshatrapa Rūdrasena I, 123, 124, 129, 143.

4. Mahākshatrapa Dāmasena, 149, 159.

5. Mahākshatrapa Rūdrasena II, 192, 193, 194, 200, 201, 202, 203.

6. Mahākshatrapa Bhartridāman, 218, 219, (221, 222, 223, 224, 225, 226, if he continued to rule).

Chashṭana

Chashṭana, the son of Ghsamotika, was the founder of this royal dynasty. His coins show him both as Kshatrapa and Mahākshatrapa. His father Ghsamotika is only known as Kshatrapa from his coins. The two rulers of the Kshaharāta dynasty, who preceded him are not known to possess the title of Mahākshatrapa, though they were rulers of considerable importance. It is quite possible that Chashṭana was the first to adopt the grand title of Mahākshatrapa, which apparently had no particular political significance, reserving the title of Kshatrapa for the succeeding prince or heir-apparent, though we cannot say anything definite about the matter. The title could have been given to his son Jayadāman towards the end of his reign, but he died during the life time of his father before becoming Mahākshatrapa. Consequently his son Rūdradāman I was probably made Kshatrapa, though none of his coins refer to him as Kshatrapa. The Andhau inscriptions, however, dated in the year 52, refer to both Chashṭana and Rūdradāman as *Rājā* thereby suggesting that the two were ruling concurrently.⁵ In all probability however, one was Mahākshatrapa and the other, as heir-apparent, had the title of Kshatrapa when this inscription was written. It would not, therefore, be wrong to assume that Rūdradāman succeeded Chashṭana, not long after the year 52.

Rūdradāman I

Rūdradāman I, probably ruled for not less than 25 years. His activities are narrated in detail in the Junagarh inscription dated 72,⁶ probably inscribed in the zenith of his reign. He may have reigned a few years more after this date, but we have no material that would enable us to fix the end of his reign precisely.

Towards the end of his reign, his elder son Dāmaghasada (Dāmajadaśrī I), being heir-apparent, was made Kshatrapa, and coins bearing this designation are well known though they are all undated. We do not know how long he was a Kshatrapa under his father but he became Mahākshatrapa after him. He apparently ruled for a short period for his coins as Mahākshatrapa are extremely rare. He was succeeded by his younger brother Rūdrasimha I in 101.

Rūdrasimha I

Rūdrasimha I is known to be Kshatrapa, during the Mahākshatrapaship of his brother Dāmajadaśrī in the year 101. He be-

5. *The Age of Imperial Unity*, p. 183.

6. *EI*, VIII, 36.

came Mahākshatrapa as early as 101,⁷ according to a coin in the Sarvania hoard, though it was formerly believed that he assumed this title only in 103.⁸ The solitary coin⁹ known to have been issued by him as Kshatrapa also bears the same date. Rapson had identified the unit figure on this coin as 2, but it has only one dash shown like a dot, and represents the figure 1 and not 2.¹⁰ There appears no space for two dots or dashes which make the figure 2. But against, these numismatic evidences, the Gunda inscription calls him Kshatrapa in the year 103.¹¹ However, more weight should be given to the coins, which were royal issues, than to the inscription of a private individual. It is quite possible that the distinction between the status of a Kshatrapa and Mahākshatrapa, was not so apparent to the people till then, being innovated not long before.

But this is not such a great problem as Rapson's suggestion regarding his succession. On the basis of a coin of Mahākshatrapa Jivadāman, on which the date is taken to be 100, it has been suggested that he succeeded his father Mahākshatrapa Dāmajada I, and his uncle Rūdrasimha I acted as Kshatrapa upto 103. In the same year he successfully revolted against his nephew Jivadāman.¹² The date on Jivadāman's coin has been read as 100, but this is open to doubt as the unit or decimal figure might be out of flan.¹³ Rapson thinks that his coin was issued between 100 and 103 and supports his suggestion from the legend on this coin and the coins of Jivadāman that are definitely known to have been issued in 119-20.¹⁴ The two legends differ in the method of writing the names of Dāmajada and Jivadāman. While the names on the latter coins are written *Dāmajadasa* and *Jivadāmasa*, those on the coin under discussion are spelt as *Dāmajadaśriya* and *Jivadāmna*. But he has ignored the fact that Dāmajada himself, on his coins, had used both the forms of his name. On the coins of variety *a* issued as Kshatrapa, we have the names *Rūdradāma* and *Dāmaghsadasa* and on variety *b* it is *Rūdradāmna* and *Dāmajadaśriya*.¹⁵ Can we account the coins to two different periods of his reign just on the basis of these two forms of legends? Again Rūdrasimha himself, names his father as *Rūdradāma* and *Rūdradāmna* simultaneously on the coins issued by him as Mahākshatrapa.¹⁶ Coins of the same year (i.e. 114)

7. ASIAR 1913-14, 223.

8. BMCAK, intro. cxxvi.

9. BMCAK, coin 295.

10. Ibid, pl. XI.

11. IA, X, 157.

12. BMCAK, intro., cxxv.

13. Ibid, cxxiv; JRAS, 1899, 378(1).

14. Ibid, cxxv.

15. Ibid, 80-81.

16. Ibid, 87, 89.

have both the forms.¹⁷ How can this be accounted for? The possibility of a unit and decimal figure on the coin is always there, and we, therefore, cannot place the coin early in the year 100-103. It may, however, be contemporary to Jivadāman's issues of 119-120.

Altekar has supplemented Rapson's suggestion by pointing out to the features of the king portrayed on the coin. To him the features of Jivadāman, as shown on the coins dated 118-23 (*B.M.C.* Nos. 289-291), are aged and careworn, suggesting that he was at least about 45 at that time; and on coin 228 (*i.e.* the coin under discussion) he is portrayed as an energetic, young person whose age could not be more than 25 or 30 years at the most.¹⁸ We should not forget, however, that the portraits on these coins were more or less conventional. I have already pointed out that a careful examination of the coins of Rūdrasena I (now in the British Museum), which constitute a long series and include almost every year of his reign should convince us that the coins of two consecutive years are quite dissimilar, the portraits being very different, while the coins of periods widely separated appear alike.¹⁹ It would therefore appear that the evidence of portraiture is not very reliable.

Above all we cannot ignore the traditional method of succession among these rulers as is known from their chronology. According to it Rūdrasimha, would never have been a Kshatrapa under his nephew. He could only hold this position as the successor of his father or his brother. Similarly Jivadāman could not succeed his father as Mahākshatrapa as long as there was an uncle, and could come to throne only after his uncle, which he did, quite naturally, in 119. Again we find Jivadāman's cousin Rūdrasena I, son of Rūdrasimha I, succeeding him in conformity with the family rule of succession. He was first a Kshatrapa during the Mahākshatraship of his cousin Jivadāman and then he became Mahākshatrapa after him. Had there been any feud, as Rapson and Altekar suggest, we would not have had Rūdrasena I as Kshatrapa during the Mahākshatraship of Jivadāman. It is, therefore, not correct to assume that Jivadāman ruled as early as 100-103.

Four coins in the British Museum, issued by Rūdrasimha I, on which dates had been read as 110 and 112, have the title of Kshatrapa instead of Mahākshatrapa.²⁰ As such these coins had created another problem for scholars. It has been suggested

17. The coin in the British Museum of this date has *Rūdradāmna* (*BMCAK*, 92) and in Sarvana hoard has *Rūdradāma* (*ASIAR*, 1913-14, 231).

18. *JNSI*, I, 18-19.

19. *IHQ*, XXIX, p. 84-87.

20. *BMCAK*, coin 313-316.

that Rūdrasimha I was dispossessed of his higher authority and was reduced to the rank of a subordinate. Rapson thought that this was brought about by Jivadāman, who he thinks was constantly at feud with Rūdrasimha I.²¹ Bhandarkar attributes this reduction of authority to the usurpation of Mahākshatrpa Śśvaradatta.²²

Formerly no coin of Rūdrasimha I as Mahākshatrpa earlier than 113 was known. Recently a coin of the year 112 issued as Mahākshatrpa has been found in the Gwalior Museum.²³ So now, we have coins of Rūdrasimha I, issued both as Kshatrpa and Mahākshatrpa for the years 110 and 112, while we have no coin for the year 111 issued in either capacity.

Now, coming to the coins issued by him as Kshatrpa, which are exclusively in the collection of the British Museum, it may be pointed out that the two coins (coins 313 and 314), no doubt, have the symbols for 100 and 10. But the other two coins (coins 315 and 316) only have the symbol of hundred clear, and the digit symbol is indistinct and it is difficult to say if there was any unit symbol at all.²⁴ So, to me these two coins also date in the year 110, and there is only the year 110 of which we have these four coins, which have the lower title of Kshatrpa for Rūdrasimha I. This lower title may be an error of the die-cutter and no importance should be attached to it. Such errors in Indian numismatics are not unknown. On many coins of Kumārgupta I we have *Rājādhirāja* instead of *Māhārājādhirāja*.²⁵ As such there is nothing to suggest any reduction of authority of Rūdrasimha either by Jivadāman or Śśvaradatta.

The last date so far known for Rūdrasimha I was 118 (known from a coin in British Museum), but now we have a coin in Vasoī hoard of the year 119 and it extends his reign by one year.²⁶ A potin coin in British Museum has also the unit figure which seems to be 9, but Rapson was hesitant to recognise its existence, simply because no other coin of this ruler was known for that year and his successor Jivadāman had that date on some coins.²⁷ The issues of coins by two successive rulers in the same year is by no means impossible. It can well be that one ruled in the earlier part of the year and the other succeeded in the latter part.

21. *Ibid*, intro. cxxvi.

22. *ASIR*, 1913-14, 229-30.

23. *JNSI*, XVII, 94.

24. *BMAK*, Pl. XI.

25. *BMAK*, p. 96, 100; for other defective legends see p. 105.

26. *N.S. XLV*, p. 98.

27. *BMAK*, 93, f.n. 1; coin 324.

Towards the end of the rule of Rūdrasimha I, his elder nephew Satyadāman was Kshatrapa. He is known from a single coin, on which unfortunately the unit and the digit figures are missing.²⁸ Rapson first thought him to be the younger brother of Jivadāman, enjoying Kshatrapaship during the Mahākshatrapaship of the latter and assigned him the date 119,²⁹ but later he revised his views and pointed out that he should be the elder son of Dāmajada and the elder brother of Jivadāman, on the basis of the similarity with the legends of both these as Kshatrapa, and suggested for him an earlier date.³⁰ But according to the tradition of the succession, as is noticed from the chronology, Satyadāman, being the eldest nephew of Rūdrasimha I, could only be the rightful claimant of the authority after Rūdrasimha I and not before him. As such he would only have been Kshatrapa in 119 or a little earlier.

It appears that in consonance with family tradition, Satyadāman was nominated successor by his uncle and accordingly he assumed the title of Kshatrapa. But some thing happened to deprive him of his higher authority. Quite possibly he died early, or it might be that he was killed, and Jivadāman, the next legal successor, stepped to Mahākshatrapaship directly, without being Kshatrapa in or about 119.

Jivadāman

Jivadaman's reign was uneventful and brief. He ruled, in all probability, till 122. Though no coins of his are known after 120, his successor Rūdrasena I is known from his coins to be Kshatrapa for at least two years in 121 and 122. This shows that he acted as heir-apparent during this period; and that could only be in the life time of his uncle Jivadāman.

Rūdrasena I

Rūdrasena I became Mahākshatrapa in 122, as is known from the Muleshwar inscription³¹ but his coins issued in this capacity are known only from 125. He ruled, probably, till 144, for this date, though of doubtful reading, is found on one of his coins, Rapson says that the decimal figure on this coin is probably to be restored as 40. If so, the unit figure must certainly be 4.³² The

28. *Ibid.*, p. 95.

29. *Ibid.*, 95, f.n. 1.

30. *Ibid.*, intro. cxxviii.

31. *JRAS*, 1890, 652; *Bhavanagar Inscriptions*, 23.

32. *BMCAK*, 104; coin 370.

coins of his son Prithvisena are known as Kshatrapa for the year 144,³³ which seems to support this possibility.

Prithvisena

Prithvisena, being the son of Rūdrasena I, was in no way the legal successor of his father, as his two uncles Saṅghadāman and Dāmasena were alive. But the evidence of the coins shows that Rūdrasena I, made his son Kshatrapa and this disregard of tradition may have caused a fratricidal war, in which the father and son, may have lost their lives.

Saṅghadāman and Dāmasena

After the death of Rūdrasena I and his son Prithvisena, Saṅghadāman became Mahākshatrapa as a natural successor in 144. He could not enjoy much peace for it appears that the feud that had ended with the death of Rūdrasena I and his son, took a new turn and the two surviving brothers fought it out. Consequently Saṅghadāman could rule only for a short period during the year 144 and 145. In 145 Dāmasena became Mahākshatrapa, without ever being Kshatrapa. He ruled till 158, though not in peace. His coins for the years 148 and 149 are missing and we have a coin of Saṅghadāman of the year 149 in the Watson Museum,³⁴ which shows that he was living at least in that year. He did not die in the struggle against the Mālavas, as was suggested by Alteker.³⁵ It appears that being ousted by his brother Dāmasena, Saṅghadāman was not quite friendly and constantly tried to reassert his authority and success, probably crowned his efforts, though short-lived.

Though Dāmasena get rid of Saṅghadāman, internecine strifes seem to have continued, and during the later part of his regime, we have a chain of Kshatrapas. As early as 154, one of his nephews Dāmajadaśrī II is known to be Kshatrapa, though only for two years. In 156, we have his cousin Viradāman, the son of Dāmasena as Kshatrapa. He held this post till about 161, but he, too, was not destined to be Mahākshatrapa. It appears that during the years 160 and 161 the internecine strife became worse and the coins testify to this chaotic condition during the next three years. We have the coins of Viradāman of the years 160 and 161 as Kshatrapa; and at the same time we also have the coins of his brother Yaśodāman for the year 160 as Kshatrapa and for the years 160 and 161 as Mahākshatrapa. We also have the coins of his third brother Vijayasena

33. *Ibid.*, p. 106.

34. *ASIAR*, 1913-14, 232.

35. *Proc. I. H. C.*, Lahore, 1940, 100.

for the years 160 and 161 as Kshatrapa and 161 and onward as Mahākshatrapa.³⁶

This shows that the two brothers Yaśodāman and Vijayasena did not honour the family tradition and disowned their allegiance to their elder brother, as soon as their father died and probably even in his life time. Possibly during his life time, as a rival to Viradāman, the two younger brothers claimed for themselves the succession and issued their coins as Kshatrapa in 160. Then without waiting further, it seems that Yaśodāman took a step further and issued his coins declaring himself a Mahākshatrapa, to assert his superiority over the others and continued to have that claim in 161. Meanwhile the feud between the three brothers continued. In 161, Viradāman and Yaśodāman, both were possibly killed at the hands of Vijayasena, who ultimately became Mahākshatrapa.

Vijayasena

Vijayasena ruled peacefully till 172, when it appears he died suddenly, having no time to nominate his successor. Being the third son of his father, he may have been quite young when he became Mahākshatrapa, and as such could not have anticipated an early death. This would account for his not nominating a successor or Kshatrapa.

Dāmajadaśrī III

On the sudden death of his brother, Dāmajadaśrī III became Mahākshatrapa in 172, without being Kshatrapa and ruled for nearly six years, and in 177, we find his nephew Rūdrasena II, son of Viradāman, as Mahākshatrapa. This new Mahākshatrapa also succeeded to the high rank without being Kshatrapa. In all probability, he also came to the throne in the circumstances, similar to those of his predecessor.

36. Dates of the Kshatrapas known during the later part of the reign of Mahākshatrapa Dāmasena are as follows:

1. Viradāman

156 BM; PWM; Junagarh hoard of 520 coins.
157 Sonapur hoard.
158 PWM; Sarvania hoard.
159 PWM; Sarvania hoard.
160 BM, PWM, Sarvania hoard.
161 Vasoj hoard.

2. Yaśodāman

160 BM; Sarvania hoard (same year, as Mahākshatrapa, Sarvania hoard).

3. Vijayasena

160 BM.
161 Sarvania hoard; (same year as Mahākshatrapa, Sarvania hoard).

Rūdrasena II

Rūdrasena II had a peaceful reign of about 22 years till 199. Then trouble again arose in the family, when he nominated his son Viśvasiṃha as his successor i.e. Kshatrapa. This was not appreciated by his second son Bhartṛidāman, for we find him also issuing coins as Kshatrapa from the year 199. The coins of both Viśvasiṃha and Bhartṛidāman issued as Kshatrapa, are known till the year 202 and thence that of Bhartṛidāman alone till 204. This shows that both asserted their claim for Kshatrapaship for some time, a situation like that of the sons of Dāmasena. Then it appears that Bhartṛidāman succeeded in his claims for the Kshatrapaship and he enjoyed it alone till 204 when Viśvasiṃha withdrew his claim over the title, either by his own choice or reluctantly. In 204, Bhartṛidāman succeeded his father. Though the coins of Rūdrasena are not known later than 199, yet these circumstances suggest that he may have been alive till 204.

Bhartṛidāman and Viśvasiṃha

That Bhartṛidāman succeeded his father in 204 as Mahākshatrapa, is being suggested here for the first time. It had been earlier believed that Viśvasiṃha succeeded his father in 200 and continued to rule till 211,³⁷ for the simple reason that the coins of Bhartṛidāman as Mahākshatrapa, earlier than 211 and of Viśvasiṃha as Kshatrapa later than 200 were not known; and that some coins of the latter are known as Mahākshatrapa. But now we have the coins of Viśvasiṃha as Kshatrapa till the year 202³⁸ and that of Bhartṛidāman as Mahākshatrapa, as early as 204 are known from Sarvania hoard.³⁹ Since we have also his coins as Kshatrapa for the year 204, the hypothesis suggested here is more likely.

As regards the coins of Viśvasiṃha, issued as Mahākshatrapa, it may be pointed out that they are badly executed and the dates are uncertain. The coins in the British Museum have no legible dates.³⁸ On the three coins of Sarvania hoard only the symbol for 200 is clear and the unit or tens symbol is uncertain.³⁹ There is only one coin on which Bhandarkar is sure of the date 200, without any digit or unit.⁴⁰ But, we cannot have any coin of Viśvasiṃha as Mahākshatrapa for this date, since he is known from his own coins as Kshatrapa till 202. So that the coin Bhandarkar had seen might be of the uncertain date type from which the unit and digit figures were missing.

37. BMCAK, intro, cxxxix.

38. *Ibid*, cxxxix; 152.

39. ASIAR, 1913-14, 238.

40. *Ibid*, 238.

But it is certain that Viśvasimha issued coins as Mahākshatrapa. These coins might be dated later than the dates suggested for them. We have his one coin in the hoard of 520 coins of Junagarh Museum which has the clear date 211 with the higher title.⁴¹ As such these coins may be put along with this coin.

Whatever the case may be, these coins, to me do not suggest any real Mahākshatrapaship for Viśvasimha. It is quite possible that even after being ousted as Kshatrapa, he continued in his efforts to occupy the throne and issued coins as Mahākshatrapa to assert his claims. It is also quite possible that he might have succeeded for a little while in his efforts. It may be pointed out that we have some coins of Bharṭṛidāman, which are as badly executed as those of Viśvasimha.

An amicable division of the dominion between the two claimants Bharṭṛidāman and Viśvasimha is suggested by H. V. Trivedi.⁴² He has pointed out that the coins of Bharṭṛidāman as Mahākshatrapa till 210 are all known exclusively in the Sarvania hoard, whereas all those catalogued by Rapson represent the latter part of his reign from 211. He presumes that these latter coins were found in Western India. So, in his opinion Bharṭṛidāman might have begun his career somewhere in Rājasthān and Malwa, quite apart from his ancestral dominions in West India, having been driven out by his brother Viśvasimha, while Viśvasimha might have ruled in his homeland continuously from 200 to 211. His suggestion implies that Bharṭṛidāman could take up the ancestral dominion only after 211.

The suggestion is no doubt interesting, but then this would mean that Bharṭṛidāman was the first of the dynasty to have his sway over Rājasthān, whereas we do find coins of earlier rulers in these areas. Secondly, it is not correct that the coins of Bharṭṛidāman of the early period are known exclusively from Sarvania hoard. The following extract from Rev. Scott's paper on the Uparkot hoard, suggests that it did include the coins of early period.

"There are 207 coins of the nineteenth Kshatrapa, Bharṭṛidāman..... All the coins in which the king is styled simple 'Kshatrapa' are of the superior style. There are 18 such coins, of which five have traces of the date 201. I divided the rest of the coins not only into dated and undated, but into two classes in each case, according as they were of the well executed or of the coarse type..... Of 59 dated coins about 20 belong to the first style and the

41. NS, XLVII, 97.

42. JNSI, XV, pp. 160-161.

rest are of coarse workmanship. The dates range from 201 to 217(?)."⁴³

Rev. Scott is not clear and he does not explicitly say that the coins have the title Mahākshatrapa, but when he says that there were only 18 coins of Kshatrapa, the implication is that the rest were issued as Mahākshatrapa. Bhartṛidāman is not known as Kshatrapa later than 204. So the coins dating from 206 onward in the Uparkot hoard were definitely of the Mahākshatrapa type. More definite on this point is the Junagarh Museum hoard of 520 coins, in which we have the coin of Viśvasimha dated 211. It includes the coins of Bhartṛidāman for the years 207, 209, 210, 211.⁴⁴ This shows that Bhartṛidāman was in occupation of his ancestral land all these years, though he was constantly troubled by his rival brother, who also claimed Mahākshatrapaship.

However, Bhartṛidāman was Mahākshatrapa at least till 220. But he had nominated his son Viśvasena as his successor i.e. Kshatrapa as early as 206, as is known from the coins in Sarvania hoard and in the Prince of Wales Museum. But conspicuously enough we do not have any other of his coins as Kshatrapa between this date and 215. Has this gap something to do with the feud between his father and uncle? The date of Viśvasimha as Mahākshatrapa i.e. 211 falls within this gap.

Viśvasena

Once Viśvasena was anointed as Kshatrapa in 206, it seems that he continued to hold that rank till 226, when Rūdrasimha II of the third Kshatrapa dynasty ousted the Kārddamakas from their authority. It is significant that we do not have any coin of this ruler issued as Mahākshatrapa. This either means that Bhartṛidāman was alive all along his son's Kshatrapaship and was Mahākshatrapa; and it was from him that Rūdrasimha II wrested power; or that the power of Viśvasena after his father was so reduced that he could not claim for himself the high sounding title of Mahākshatrapa. It seems to find support from the fact that his successors, belonging to the third dynasty, too did not assume the title of Mahākshatrapa.

43. *JBBRAS*, XX (1902), 206.

44. Record prepared by G. V. Acharya, now in the Prince of Wales Museum.

REPORT FOR THE YEAR 1953-54

GENERAL

The growing popularity of the Prince of Wales Museum with the public is reflected in the increased daily attendance of visitors. During the year under report the average attendance on days when a ticket had to be bought amounted to 1,300 persons, on working days 5,000 and on holidays 7,000. On some religious holidays, however, the Museum was visited by as many as 10,000 people.

At the moment, the Prince of Wales Museum has three sections: Art, Archaeology and Natural History. The expansion and development of the three Sections necessitates additional space and it is encouraging to note that the question has been engaging the attention not only of the Trustees but also of the Government of Bombay. Rough plans were also prepared for the establishment of an Industrial Section by the Director of Technical Education, Government of Bombay. The Invertebrate Gallery of the Natural History Section has not yet been thrown open to the public, though it is hoped to do so shortly. It has also been decided to convert the Mezzanine Circular Gallery on the first floor into an Indian Picture Gallery.

As referred to in last year's report, it was decided to enrich the Museum collections by exchanging duplicates with suitable exhibits from other museums. During the year under report the Archaeological Section received a varied collection of Rajghat pottery, terracotta animal and human figures, and terracotta seals of different periods, especially those belonging to the period extending from the Maurya to the Gupta dynasty, from the Bhārat Kalā Bhavan, Banaras, in exchange for duplicates from the Mohenjodaro collections. Besides, the Art Section arranged to exchange textile pieces with the Museum für Völkerkunde, Basle, Switzerland. The collections of Art, Archaeology and Natural History were also enriched as a result of officers undertaking tours and expeditions.

The K. R. Cama Institute is asking for return of the Susa antiquities given on loan to the Museum some years ago in order to present them to the Parsi Panchayat Museum. The antiquities, excavated by R. De Mecquenem and Dr. J. M. Unvala in Iran, formed a noteworthy collection in our Foreign Gallery, and much as we regret their departure from the Museum, we are thankful to

the Cama Institute for allowing us to retain 61 antiquities as a gift to the Museum.

Of the educational activities of the Museum, those conducted by the Nature Education Organiser attached to the Natural History Section are worth mentioning. Under the scheme classes are held in the Museum in which teachers and pupils from the schools of Bombay State participate. Not only lectures are delivered but practical demonstrations are also held. Besides, there is a comprehensive scheme of publishing a series of booklets on the subject, of which, *Our Birds*, is the first. This popular work has come out in four languages: English, Hindi, Marathi and Gujarati. The proposed Art Booklet, containing illustrations of the finest specimens in the collections of the Art and Archaeological Sections, has also been published.

ART SECTION

Acquisitions

A large number of Indian pictures belonging to the Rajasthani, Kangra, Deccani and Mughal schools were acquired. These new acquisitions have greatly enriched the collection of paintings in the Museum (see Appendix A). Interesting shawls and *rumals* of Kashmir and Kulu workmanship, rich brocades and *sāris* from Aurangabad, agate cups and sword handles of Delhi workmanship, old brass and silver ware including a pair of silver *chauri* handles datable to the 18th century and some ivory playing cards are amongst the interesting exhibits added to the collections of the Museum. It has been the policy of the Trustees to acquire such objects as fill up the lacunae in the Museum collection and are of artistic merit, and this was always borne in mind when making purchases.

The Director of the School of Art, Bombay, had offered an interesting carved wooden balcony of Gujarat workmanship datable to the 18th century to the Museum and the Trustees had already accepted the gift. The balcony itself was brought to the Art Section and fitted in Sir Dorab Tata Gallery.

The Trustees of the Museum had decided on a liberal policy of exchange with different museums in the country and also outside the country. Accordingly, with the permission of the Trustees, 14 Indian textiles, of duplicate nature, were handed over to the representative of Dr. Alfred Buhler, Curator of the Ethnological Museum in Basle, Switzerland. The Museum received 6 Indonesian ikat pieces of great interest in exchange.

Research, Publication & Education

As usual, a large number of students and scholars took advantage of the collections, and the staff supplied the information desired. There was an increased demand for photographs, both by scholars and journalists. With the growing demand for Indian art objects for publicity purposes, requests were received for permission to use Museum exhibits to illustrate calendars.

The Films Division of the Ministry of Information and Broadcasting took full advantage, as usual, of the Museum collection in connection with the preparation of their documentaries. All India Radio also gave good publicity to the Museum from time to time. Members of the staff gave a number of talks on cultural topics, including the Museum collection, during the year.

The export of art objects from the country is prohibited with the result that the Customs authorities of Bombay make a thorough examination of art objects received by them for export. The Museum being the only authority able to give expert opinion on art objects, its opinion is often sought before the export of an art object is allowed. During the course of the year the Museum staff had to examine a large number of art objects and submitted their report to the Custom authorities. This service has been very much appreciated and in certain cases it has stopped unauthorised export of art treasures.

Foreign visitors also took advantage of the free advice given to them regarding the purchase and export of art objects. This free service has been of great help to those who wish to buy objects of Indian art but do not know very much about it.

Rearrangement, Preservation & Restoration

In accordance with the decision of the Trustees, the reorganisation of the Circular Gallery on the mezzanine floor was undertaken. It was realised that with proper lighting arrangements and fixtures, the gallery could become a fine place for exhibiting Indian pictures.

As usual, a very large number of school children visited the section. Owing to the absence of a guide, it is difficult to conduct large parties around the Section, but full facilities were given to visiting parties which arrived by previous appointment.

It was long felt that a Museum guide which could introduce the laymen to the collections was necessary. Accordingly, the

preparation of a book entitled *Indian Art* was taken in hand. Picture postcards and folders were also published.

On account of the brittle and perishable nature of exhibits in the section, every care has to be taken for their preservation. Fragile objects such as textiles, pictures, manuscripts, etc. have to be preserved against the attack of mildew and insects, and judicious use of disinfectants, preservatives, airing and fumigation chamber treatment has done much to keep them in good condition.

It was found that the following two pictures viz. Nos. 22.4600 "Figures in Landscape", and 22.4632 "The Autumn Winds" by Montecelli, required some restoration work. Mrs. A. B. Schwarz, an expert restorer, was entrusted with the work and the removal of old varnish and fixation of flaking colours have given the paintings a new lease of life.

Library

Important publications pertaining to Indian art and archaeology were added. The executors of the estate of the late Mr. Muncherjee C. Wadia, through Sir Cowasji Jehangir, offered a large number of books as a gift to the Museum library. The Trustees accepted 75 books with thanks and these have been added to the Section Library.

ARCHAEOLOGICAL SECTION

Numismatics

During the year under report a lot of work connected with the examination, assignment and listing of coins received from the Bombay Branch of the Royal Asiatic Society and the Director of Archives of Bombay State was done. The Assistant Curator examined 655 silver *chakrams* of Travancore State, 203 silver Gadhaiya coins and 1642 Andhra lead coins. The Gallery Assistant examined 131 gold coins of the Sultans of Gujarat, 1 gold coin of the Sultans of Madura, 57 silver Mughal coins, and 1,102 copper coins of the Sultans of Gujarat. Besides, he prepared a list of about 600 duplicate coins of the Sultans of Delhi for sale to various museums and coin collectors.

Exchange and Acquisition

A black stone image of Mahishāsūramardini of the Medieval period from Marole was presented by L. I. Corty of Volkart Bros., Bombay.

The Director of Archives, Bombay State, presented two stone images, one of Vishṇu and another of Chāmunda, both of the later mediaeval period, found at Chandrāvati near Palanpur.

Terracotta figures and pottery vases of Rajghat were received from Rai Krishnadasa of the Bhārat Kalā Bhavan, Banaras, in exchange for antiquities of duplicate nature from Mohenjodaro in the Museum Collections.

The hitherto small Anthropological collection of the Museum was greatly enriched by the acquisition of Dr. Verrier Elwin's collection of objects used by the Bondo, Gondo, Warli and other aboriginal tribes. The new collection was lent to the Museum by the Anthropological Society of Bombay. Photographs of Bondo and Warli men and women in typical costumes, and tribal dances were also displayed along with the exhibits.

The Susa antiquities of the Foreign Gallery, on loan from the Cama Oriental Institute, were returned to that Institute, only a representative set of antiquities having been kept for the Museum.

Visitors

The following visitors came to the Museum for specific studies: Messrs. J. J. Boeles of Bangkok, Robert Hardy Andrews of California, and Monroe Wheeler of the Museum of Modern Art, New York, for studying Indian sculpture; Prof. Rama Rao of the Hyderabad University for studying Andhra coins; Prof. S. Eilenberg, Columbia University, for studying terracotta figures; and Mr. R. D. Ross Williamson of the U.K. High Commissioner's Office in India for studying the history of Elephanta caves and details of its sculpture.

Research

The Assistant Curator wrote two articles for the Museum Bulletin, one of the Rajghat seals and the other on a Jaina image from Chopdā. He also collected materials for an article of considerable length on the "First Native Indian Civilization". The Gallery Assistant revised the list of Mughal mint towns prepared by Mr. Whitehead several years ago and brought it up-to-date. The book has been published by the Numismatic Society of India.

The Chemical Assistant cleaned and treated all the coins examined by the Assistant Curator and the Gallery Assistant. He also treated the stucco sculptures of the later Graeco-Buddhist School of Sculpture in the Museum Collections.

NATURAL HISTORY SECTION

Research collections

The work of the staff was chiefly directed to conserving, classifying and cataloguing the existing collections, and also making additions.

Vertebrate Section

Mammals:— Of the 11 specimens added, the following may be mentioned:

1. Jerdon's Palm-Civet—*Paradoxurus jerdoni* Blanford. Locality: Peermade, Travancore. Donor: Col. E. G. Phythian-Adams.
2. The Painted Bat—*Kerivoula picta* (Pallas). Locality: Bassein, Bombay. Donor: Shri M. Machado.
3. The Common Giant Flying Squirrel—*Petaurista petaurista phillippensis* Elliot. Locality: Nilgiris. Donor: Col. E. G. Phythian-Adams.

Birds:— 53 specimens were added of which the following deserve special mention:—

1. Finn's Baya—*Ploceus megarhynchus* Hume. Locality: Calcutta. Donor: Shri Humayun Abdulali.
2. The Bhavnagar Sand-Lark—*Calandrella raytal krishnakumarsinhji* Vaurie and Dharmakumarsinhji. Locality: Bhavnagar. Donor: Kumar Shri Dharmakumarsinhji.
3. The Alpine Swift—*Micropus melba* (Linn.). Locality: Kolaba District, Bombay. Donor: Shri Humayun Abdulali.
4. The Swallow-Plover—*Glareola maldivarum* Forstr. Locality: Bhavnagar. Donor: Kumar Shri Dharmakumarsinhji.
5. The Sand-Plover—*Glareola lactea* Temm. Locality: Madhmeshwar, Nasik. Donor: Shri Humayun Abdulali.

Egg collection: A catalogue of this collection was made.

Reptiles:— 8 lizards and 44 snakes were the additions made during the year under review.

Amphibians:—In all 438 specimens were added which include a single specimen of the Mountain Caecilian—*Inchthyophis glutinosus* (Linn.) collected near Gersoppa, North Kanara and donated by Shri Humayun Abdulali, the rest being frogs and toads the majority of which were donated by Shri Humayun Abdulali.

Of these additions, special mention must be made of a new species of frog *Nyctibatrachus humayuni* Bhaduri and Kripalani collected at Khandala and subsequently at Mahableshwar and North Kanara and donated by Shri Humayun Abdulali. This was recorded together with descriptions of the adult and the tadpole accompanied by a useful account of the field notes by Shri Humayun Abdulali, published in the Journal of the Bombay Natural History Society, Vol. 52 pp. 852-859.

Fish:— 178 specimens were added to the existing collection.
Invertebrate Section:—

Mollusca:—Rearrangement of the entire collection was carried out and a catalogue is in progress.

Arthropoda

Insecta:—176 butterflies donated by Dr. T. Norman, Assam, marked the additions during the year under report.

A few beetles, grass-hoppers and ants mostly donated by Shri Humayun Abdulali were added to the collections.

Arachnida:— A catalogue of the collection was made.
Public Galleries:—

Mammal Gallery:— The following additional exhibits were displayed:

1. South Indian Yellow-throated Marten—*Martes gwatkinsii* Horsfield. Locality: Nilgiris, South India. Donor: Col. E. G. Phythian-Adams.
2. A group displaying the Fulvous Fruit-Bat—*Rousettus leschenaulti* (Desmarest) and the Long-armed Sheath-tailed Bat—*Taphozous longimanus* Hardwicke. Locality: Elephanta Caves, Bombay.
3. The Indian Gazelle—*Gazella gazella* Pallas. Locality: The Victoria Gardens, Bombay.

All the other Habitat Groups were retouched and renovated.

Bird Gallery:—

The following additions were made:—

1. The Bank Myna—*Acridotheres ginginianus* (Latham).
Locality: Baroda. Donor: Shri J. Gabriel.
2. The Common Swallow—*Hirundo rustica rustica* (Linnaeus).
Locality: Baroda. Donor: Shri J. Gabriel.
3. The Purple-rumped Sunbird—*Cinnyris zeylonica* (Linnaeus).
Locality: Colaba, Bombay. Donor: Shri J. Gabriel.
4. The Small Green Barbet—*Thereiceryx viridis* (Boddaert).
Locality: Mysore, South India. (From the reference collection).
5. The Crimson-throated Barbet—*Xantholaema malabarica* (Blyth). Locality: Sirsi, North Kanara. Donor: Shri Humayun Abdulali.
6. The Chestnut-headed Bee-Eater—*Mellittophagus erythrocephalus* (Gmelin). Locality: Burma (From the reference collection).
7. The Spotted Crake—*Porzana porzana* (Linn.). Locality: Thana, Bombay. Donor: Shri Humayun Abdulali.
8. The Indian Courser—*Cursorius coromandelicus* (Gmelin).
Locality: Yewat, Poona District. Donor: Shri Humayun Abdulali.

The other exhibits and the groups in the Gallery received usual attention.

Reptiles and Fish Gallery:—

A group illustrating the feeding habits of the Indian Python—*python molurus* (Linn.) and a model of the fish Catla—*Catla catla* (Ham. and Buch.) were exhibited. Locality: Bandra Tank, Bombay. Donor: Director of Fisheries, Bombay State.

The dorsal fin of the Sail-fish—*Histiophorus gladius* (Bloch.) was replaced and the entire exhibit was renovated.

Many of the soiled labels were renewed.

Invertebrate Gallery:—

Work on this Gallery did not make any progress. The Gallery continued to house the Reptilian and the Entomological reference collections for want of alternative accommodation.

Special Exhibit—Scheme

Under this scheme, which was introduced to provide variety to the visiting public, the following exhibits were displayed for short periods at the main entrance of the Museum:—

1. The Giant Clam—*Tridacna gigas* Linn.
2. Feeding habits of the Indian Python—*Python molurus* (Linn.).
3. The Giant Spider-Crab of Japan—*Inachus kaemferi*.
4. The Corals.

Expeditions and Explorations

No major expedition was undertaken during the year under review but short week-end collecting trips to hilly suburbs of Bombay were made. They were productive of some zoological specimens which were added to the existing collections.

Assistance to individuals and institutions

Training in skinning small mammals and birds and preserving natural history specimens was imparted to Shri Baldev Singh Lamba deputed by the Virus Research Centre, Poona, in November 1953 and to Shri Ratanlal Mathur of Jeswant College, Jodhpur in March, 1954.

A demonstration of the method of mounting insects was given to the pupils of the upper classes of Sir J. J. Girls' School in February 1954.

In September 1953, facilities were afforded to the post-graduate students of the Poona University, headed by their respective professors, for studying the various reference collections. In October 1953, Shri N. A. Holme of the Hydrobiological Station, Plymouth, who wanted to study Pholadidae of the Mollusca, was given access to our collection.

The post-graduate students of the Poona University as also Shri Holme of Plymouth were provided guided tours round the Galleries.

The zoological specimens received for identification and report were attended to. Mention may be made of the 29 butterflies and the 68 beetles that were identified for Messrs. Himalayan Butterfly Company, Assam, in February 1954.

Nature Education Scheme

This scheme, which is in the 6th year of its inception, continues to do good work. Almost all the city schools have been participating in the activities initiated by Shri M. R. Raut, M.Sc., B.T., the Nature Education Organiser. There has also been good co-operation from Poona and Ahmedabad to which cities the scheme was extended, as reported last year, in order to make the scheme state-embracing.

Publications

Shri V. K. Chari published the following note in the Journal of the Bombay Natural History Society:—

“An addition to the List of Snakes of Bombay and Salsette—*Uropeltis macrolepis* (Peters)—Uropeltidae, Vol. 51, p. 213.

APPENDIX A

ACQUISITIONS OF THE ART SECTION DURING 1953

Rajasthani Paintings

- 53.29 Śrī Rāga. Rājasthānī School (probably Jaipur), end of the 17th century.
- 53.30 Dhanāśrī Rāgini. Rājasthānī School (probably Jaipur), end of the 17th century.
- 53.62 Bappā Rāval worshipping Goddess Ambā. Rājasthānī School (Udaipur), dated 1747 A.D.
- 53.63 Lady worshipping Goddess Ambā. Mixed Rajput-Mughal School, middle of the 18th century.
- 53.64 Two women playing Holī. Rājasthānī School (Udaipur), late 18th century.
- 53.66 Portrait of Mahārājakumāra Śrī Chatursingh. Rājasthānī School (Jodhpur), late 18th century.
- 53.67 Portrait of Mahārāo Gokuldās. Rājasthānī School (Kota), dated 1808 A.D.
- 53.68 Rāwat Gokuldās hunting wild boars. Rājasthānī School (Kota), dated 1811 A.D.
- 53.69 Lady visiting a saint. Rājasthānī School (Bundi), middle of the 18th century.
- 53.70 Music party. Rājasthānī School (Jodhpur), dated 1823 A.D.
- 53.72 Portrait of a hunting hound. Rājasthānī School (Kota), c. 1606 A.D.
- 53.73 Equestrian portrait of Mādhavrāo Sindhiā of Gwalior. Rājasthānī School (Gwalior), c. 1780 A.D.
- 53.74 Portrait of Mahārāvat Nāhar Singh. Rājasthānī School (Kota), early 19th century.
- 53.75 Brahmā and King Chitraka: a leaf from the Bhāgavata Purāṇa. Rājasthānī School (Udaipur), middle of the 18th century.
- 53.76 Lailā-Majnūn. Rājasthānī School (Bundi), middle of the 18th century.
- 53.77 Lady attracting animals by her music. Rājasthānī School (Bundi), dated 1742 A.D.
- 53.78 Two women visiting Śiva temple. Rājasthānī School (Udaipur), middle of the 18th century.
- 53.79 Portrait of Hitaharivarmā. Rājasthānī School (Udaipur), late 18th century.
- 53.80 Lady and duenna. Mixed Rajput-Mughal School, middle of the 18th century.
- 53.82 Āsāvarī Rāgini. Rājasthānī School (Udaipur), middle of the 17th century.
- 53.84 Portrait Mahārāvat Nāhar Singh. Rājasthānī School (Kota), dated 1832 A.D.

- 53.85 Rāṇā Arisingh of Udaipur. Rājasthānī School (Udaipur), late 18th century.
- 53.86 The Elopement. Rājasthānī School (Bundi), middle of the 18th century.
- 53.87 Rādhā and Kṛishṇa. Rājasthānī School (Bundi), middle of the 18th century.
- 53.88 Snake Charmer. Rājasthānī School (Bundi), middle of the 18th century.
- 53.89 Woman enjoying *huqqā*. Rājasthānī School (Bundi), middle of the 18th century.
- 53.90 Rādhā dressed as Kṛishṇa. Rājasthānī School (Bundi), middle of the 18th century.
- 53.91 Lady going on tryst. Rājasthānī School (Bundi), middle of the 18th century.
- 53.92 Woman driving away a cat. Rājasthānī School (Bundi), middle of the 18th century.
- 53.93 Month of Vaiśākha. Rājasthānī School (Marwar), end of the 18th century.
- 53.94 Rāg Todī. Rājasthānī School (Malwa), end of the 18th century.
- 53.95 Rāgini Mālaśrī. Rājasthānī School (Malwa), end of the 17th century.
- 53.96 Ivory playing card. Mixed Rajput-Mughal School, middle of the 18th century.
- 53.97 Ivory playing card. Mixed Rajput-Mughal School, middle of the 18th century.
- 53.98 Anukūlā (favourably-disposed) Nāyakā. Mixed Rajput Mughal School, early 18th century.
- 53.99 Holi festival. Rājasthānī School (Udaipur), late 18th century.

Mughal Paintings

- 53.27 European lady with companion. Mughal School (Delhi), early 18th century.
- 53.32 Hindu chief with a sword. Mughal School (Delhi), middle of the 17th century.
- 53.53 Scroll of Persian documents of 17 pieces. Mughal School (Delhi), middle of the 18th century.
- 53.65 Portrait of a lady. Mughal School (Delhi), late 17th century.
- 53.71 Mughal Princes. Mughal School (Delhi), late 17th century.
- 53.81 Portrait of Mahārāja Mānsingh of Jaipur. Mughal School (Delhi), middle of the 17th century.
- 53.83 Lady enjoying *huqqā* on a terrace. Mughal School (Delhi), middle of the 18th century.

Deccan Paintings

- 53.24 Lady with a mirror. Deccan School (probaby Golconda), last quarter of the 17th century.
- 53.25 Lady with a wine cup. Deccan School (Hyderabad), middle of the 18th century.

- 53.26 Lady under a tree. Deccan School (Golconda), middle of the 18th century.
53.28 Lady with a wine cup. Deccan School (Hyderabad), middle of the 18th century.
53.31 Persian Nobleman. Deccan School (Hyderabad), middle of the 18th century

Pahari Paintings

- 53.58 Procession on the occasion of Aniruddhachand's sacred thread ceremony. Pahari School (Kangra), last quarter of the 18th century.
53.59 Gakulāshṭamī festival. Pahari School (Kangra), last quarter of the 18th century.

Kashmir Textiles

- 53.33 Shikārgāh shawl (Kulu), beginning of the 19th century.
53.35 Embroidered shawl piece (Kashmir), early 19th century.
53.36 Shawl (Kashmir), end of the 18th century.
53.37 Dulāi (Kashmir), early 19th century.
53.38 Shikārgāh shawl (Kulu), beginning of the 19th century.
53.39 Rūmāl (Kashmir), late 18th century.
53.40 Shawl (Kashmir), late 18th century.
53.41 Shawl border (Kashmir), late 18th century.
53.60 Shawl piece (Kashmir), end of the 18th century.

Peshawar Textiles

- 53.34 Bokhārā suzñī (Peshawar), late 18th century.

Aurangabad Textiles

- 53.42 Sārī piece (Aurangabad), 18th century.
53.43 Kinkhāb piece (Aurangabad), late 18th century.
53.44 Brocade (Aurangabad), 18th century.

Banaras Textiles

- 53.45 Brocade sherwānī (Banaras), late 18th century.

Hard-stone Objects

- 53.46 Banded agate cup. Mughal work (Delhi), early 17th century.
53.47 Agate wine cup. Mughal work (Delhi), early 18th century.
53.48 Sword handle. Mughal work (Delhi), early 18th century.
53.49 Agate pestle and mortar. Mughal work (Delhi), late 17th century.
53.50 Jade wine cup. Mughal work (Delhi), early 18th century.
53.51 Jade wine cup. Mughal work (Delhi), early 18th century.
53.52 Jade wine cup. Mughal work (Delhi), late 17th century.

Metalware

- 53.54 Brass *huqqā* base (Bidar), middle of the 18th century.
53.55 Brass *loṭā* (Banaras), probably end of the 17th century.
53.56 Pair of silver *chauri* handles. (Rājasthāni work), middle of the 18th
53.57 century.

Bone and Ivory

- 53.61 Human-bone cap and apron worn on ceremonial occasion (Tibet), 18th-19th
century.
53.96 Ivory playing card. Mixed Rajput-Mughal School, middle of the 18th
century.
53.97 Ivory playing card. Mixed Rajput-Mughal School, middle of the 18th
century.

PRINCE OF WALES MUSEUM OF WESTERN INDIA

[illegible]

PRINCE OF WALES MUSEUM OF WESTERN INDIA
Abstract of Income and Expenditure for the year 1953-54

BUILDING FUND

INCOME			EXPENDITURE		
	Rs.	a. p.		Rs.	a. p.
To Opening balance	2,344	1 3	By Maintenance—Museum Buildings	..	..
Imperial Bank	..	..	By Supervision—Museum Building	..	..
Chartered Bank	..	..	By Maintenance—Electric Installation	..	..
Permanent Advance	..	..	By Insurance—Servants' Quarters	..	..
	Rs.	2,344 1 3	By Insurance—Museum Building with contents	..	..
			By Interest on overdraft	..	..
			By Booster Pump	..	..
To Interest on Securities	6,380	10 0	By Closing balance	..	..
Interest on Current Account	..	..	Imperial Bank	..	..
Maintenance, Electrical Installation—recoveries from Natural History Section	..	..	Chartered Bank	..	..
Government Grant towards Insurance of the Museum Building with contents	..	..	Permanent Advance..	..	..
Transfer from Reserve Fund to meet deficit	..	..		Rs. ..	4,178 5 0
	Rs. ..	20,267 0 3		Rs. ..	4,178 5 0
Securities with Banks (Face Value)	Rs. 1,78,700	Rs. ..		Rs. ..	20,267 0 3
RESERVE FUND					
To Opening balance	7,739	12 9	By Purchase of Securities	..	..
Imperial Bank	..	..	By Transfer to Building Fund to meet deficit	..	..
Chartered Bank	..	..		Rs. ..	7,400 0 0
	Rs. ..	7,739 12 9	Closing balance	..	..
To Interest on Securities	22,287	0 0	Imperial Bank	..	..
Transfer from Provident Fund in adjustment	..	..	Chartered Bank	..	..
Transfer from Current Fund in adjustment	..	..		Rs. ..	12,185 10 9
Interest on Current Account	..	..	
	Rs. ..	6,03,000			
Securities with Banks (Face Value)	Rs. 6,03,000	Rs. ..			
				Rs. ..	44,535 10 9

PRINCE OF WALES MUSEUM OF WESTERN INDIA

Abstract of Income and Expenditure for the year 1953-54

EXHIBITS FUND

INCOME		EXPENDITURE	
To Opening balance	Rs. a. p. 6,644 0 11	By Purchase and Conveyance of Exhibits	Rs. a. p. 7,304 4 0
Imperial Bank	Rs. a. p. 911 14 10	By Closing balance	Rs. a. p. 6,546 9 11
Chartered Bank	Rs. a. p. 5,732 2 1	Imperial Bank	Rs. a. p. 400 0 10
	6,644 0 11	Chartered Bank	Rs. a. p. 6,137 9 11
To Interest on Securities	6,701 10 0		6,546 9 11
" Interest on Current Account	5 3 0		
" Purchase of Exhibits (uncashed cheque returned by M/s. Pannal & Sons)	500 0 0		
Securities with Bank (Face Value)	Rs. 1,94,200		
	Rs. 13,850 13 11		Rs. 13,850 13 11

PROVIDENT FUND

To Opening Balance—Chartered Bank	Rs. a. p. 8,283 11 10	By Payments to Subscribers (including loans)	Rs. a. p. 14,180 0 0
" Subscribers' Contributions (including repayment of loans)	16,826 2 0	By Part payment of Provident Fund dues to Mr. Pandharinath G. Subhedar	Rs. a. p. 3,000 0 0
" Transfer from Natural History Section—Provident Fund Account to Museum Provident Fund Account (Amount to the credit of Mr. Ram P. Subhedar on 28-2-1954)	1,468 6 0	By Final Payment of Provident Fund dues to Jadunath Ramsunder	Rs. a. p. 491 13 0
Interest on Securities	2,601 8 0	By Insurance Premium on Mr. K. G. Phadke	Rs. a. p. 56 12 0
Interest on amount wrongly credited by the Bank instead of Reserve Fund	134 8 0	By Transfer to Reserve Fund in adjustment	Rs. a. p. 4,000 0 0
Interest on Current Account	15 5 0		21,728 9 0
Transfer from Current Fund : Interest on loan advanced vide Audit objection	75 0 0		13,728 10 10
Board's Contribution	5,002 11 0		35,007 3 10
	Rs. 35,007 3 10		

JEHANGIR ART GALLERY

To Opening balance—Chartered Bank	Rs. a. p. 94,542 8 3	By Payments in connection with the construction of the Jehangir Art Gallery	Rs. a. p. 1,87,072 0 0
" Donations from Sir Cowasji Jehangir	93,000 0 0		Rs. a. p. 307 12 3
" Interest on Current Account	128 4 0		
	Rs. 1,87,070 12 3		Rs. 1,87,070 12 3

**NATURAL HISTORY SECTION, PRINCE OF WALES MUSEUM
OF WESTERN INDIA**
Abstract of Income and Expenditure for the year 1953-54
GENERAL FUND

INCOME			EXPENDITURE		
	Rs.	a. p.		Rs.	a. p.
To Opening balance	15,539	2 11	By Establishment	18,330	5 0
Chartered bank	Rs. a. p.		Dearness Allowance and Interim Relief	7,925	14 0
Permanent advance with the Curator	15,374	2 11	Washing and House Allowance	589	0 0
Provident Fund amount wrongly credited to General Fund	100	0 0	Board's contribution to Provident Fund	1,298	6 0
	65	0 0	Contingent Charges	619	13 6
	15,539	2 11	Stationery and Printing	125	10 3
To Government Grant	30,000	0 0	Postage and telegrams	16	11 0
Government Grant additional for dearness allowance and Interim Relief	8,263	15 0	Electric Energy and Bulbs	2,253	10 3
Government Grant for house and washing allowance	500	0 0	Mounting of Specimens, etc	1,135	1 6
Interest on Current Fund	27	4 0	Rent for Work Room	720	0 0
Sale of Booklets	9	0 0	Municipal Taxes	363	8 0
Donations from private individuals	10	0 0	Labels and Catalogues	337	6 0
Establishment	45	0 0	Scientific Expeditions, etc	76	8 0
Sale proceeds from miscellaneous articles	15	0 0	Office Furniture	91	6 6
	54,409	5 11	Transfer from Provident Fund (temp.)	600	0 0
			Uniforms	398	2 3
			Transfer to Provident Fund, Amount transferred in lieu of wrong credit	65	0 0
			Closing balance	34,886	6 3
			Chartered Bank	19,622	15 8
			Permanent Advance with the Curator	Rs. a. p.	
				19,422	15 0
				100	0 0
				19,522	15 8
				54,409	5 11
STAFF PROVIDENT FUND					
	Rs.	a. p.		Rs.	a. p.
To Opening balance—Chartered Bank	8,624	13 11	By Payment to subscribers (including loans)	3,747	0 0
Subscribers contribution (including repayment of loans)	3,417	6 0	Transfer to Prince of Wales Museum "Provident Fund" on account of Mr. Ram P. Subbendar's transfer as Gallery Assistant, Art Section	1,408	0 0
Interest on Current Account	739	0 0	Interest on Securities—difference in Bank Credit and Cash Book entry regarding Interest on Securities	0	5 0
Board's Contribution	10	4 0	Purchase of Securities	7,500	0 0
Transfer from General Fund	1,298	6 0	Transfer to General Fund, Amount wrongly credited to General Fund instead of Provident	65	0 0
General Fund to Provident Fund on account of wrong credit	600	0 0	Closing balance—Chartered Bank	12,780	11 0
	65	0 0		1,974	2 11
				14,754	13 11
Securities with the Bank Rs. 32,000.	14,754	13 11			





54.43

PLATE I, Fig. 1

Heroine awaiting hero at trysting place, Early Rajasthani School, c. 1610 A. D.



54.41

Fig. 2

Krishna embracing Rādhā, Early Rajasthani School, c. 1610 A. D.



54.37

PLATE II, Fig. 1

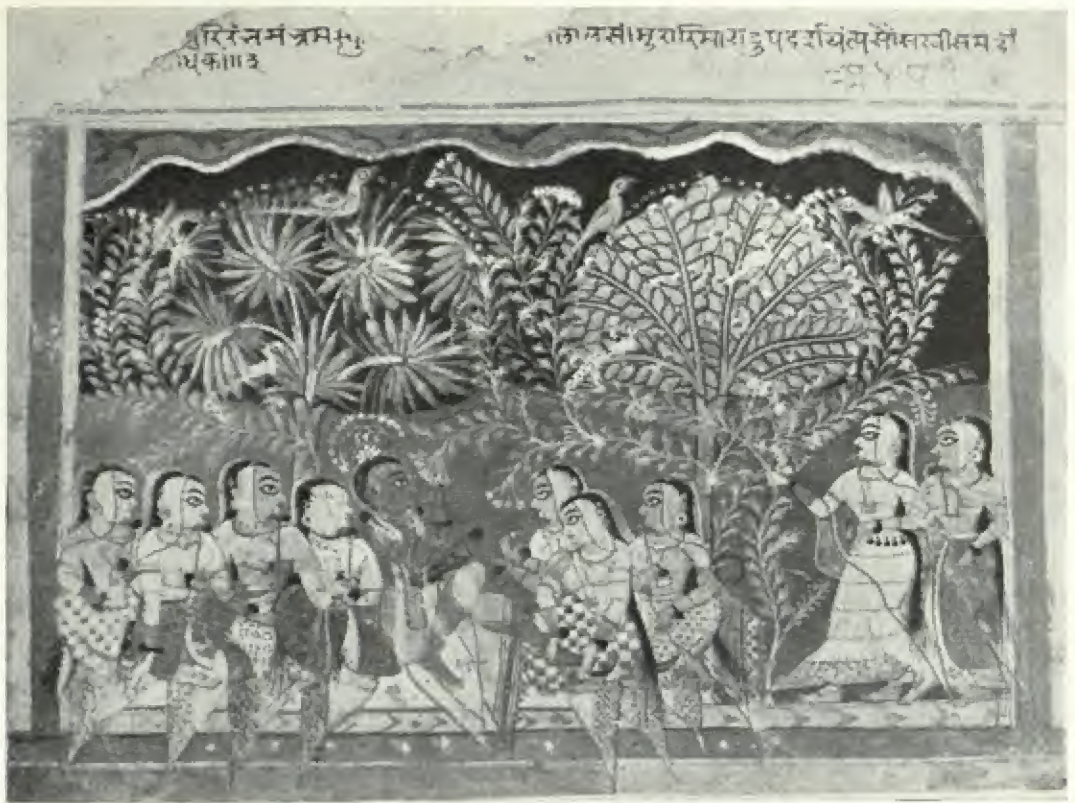
Lady conversing with confidante. Early Rajasthani School, c. 1610 A. D.



54.44

Fig. 2

Landscape in Spring. Early Rajasthani School, c. 1610 A. D.



54.45

PLATE III, Fig. 1
Krishna surrounded by Gopis. Early Rajasthani School, c. 1610 A. D.



54.40

भाप कदे बनि तव वता ॥ वदे कन ललित कोन ॥ बहु को विस क ॥ धर पल व सु क सि ॥
 ॥ स्मित वा ने ॥ ॥ रा रे ॥ ॥ ३ ॥ ॥

— ५५ —



54.42

PLATE IV, Fig. 1

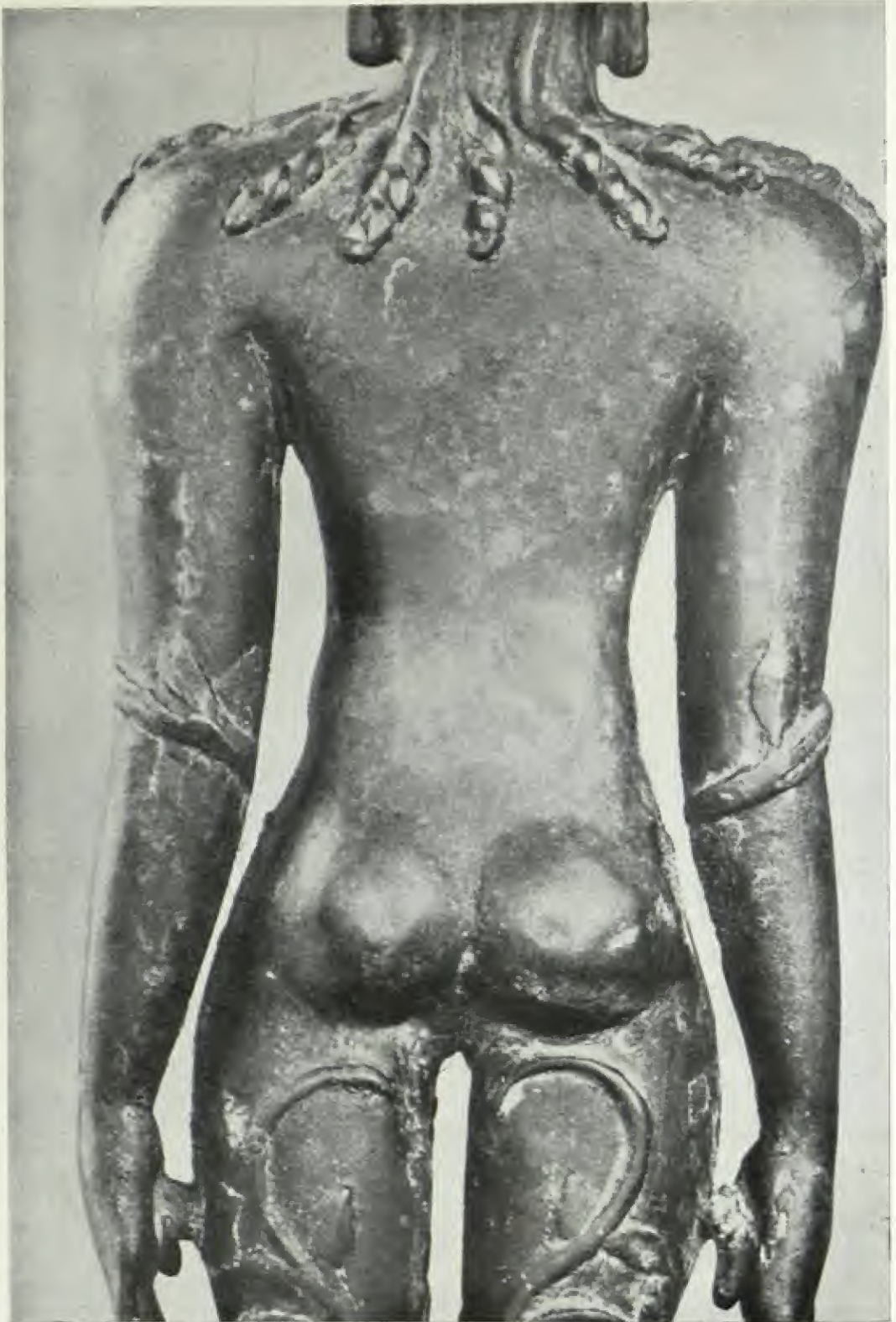
Krishna embracing Rādhā. Early Rajasthani School, c. 1610 A. D.



54.46

Fig. 2





Bāhubali, detail of the back



55.65(f.2)

PLATE VII, Fig. 1

Eight Auspicious Objects, Western Indian School, end of the 14th century A. D.



55.65 (f.9)

Fig. 2

Śakra Commanding Harinaigameshi. Western Indian School, end of the 14th century A. D.



55.65 (f.27)

PLATE VIII, Fig. 1

Birth of Mahāvīra. Western Indian School, end of the 14th century A. D.



55.65 (f.28)

Fig. 2

Mahāvīra's Illustration. Western Indian School, end of the 14th century A. D.



55.65 (f.32)

PLATE IX, Fig. 1

Mahāvīra giving away his possessions. Western Indian School, end of the 14th century A. D.



55.65 (f.34)

Fig. 2



55.65 (f.37) PLATE X, Fig. 1
Mahāvira plucking off his hair. Western Indian School, end of the 14th century A. D.





55.65 (f.46)

PLATE XI, Fig 1.

Pārśvanātha's austerities. Western Indian School, end of the 14th century A. D.



55.65(f.54)

Fig. 2.



55.56 (E.57)

PLATE XII, Fig. 1.

Rishabhanātha's *nirvāṇa* and *samvasarāṇa*. Western Indian School, end of the 14th century A. D.



55.65 (E.91)

Fig 2.



55.65 (f.92)

PLATE XIII, Fig. 1

Balamitra and his wife. Western Indian School, end of the 14th century A. D.



55.65 (f.104)

Fig. 2



55.65 (f.106)

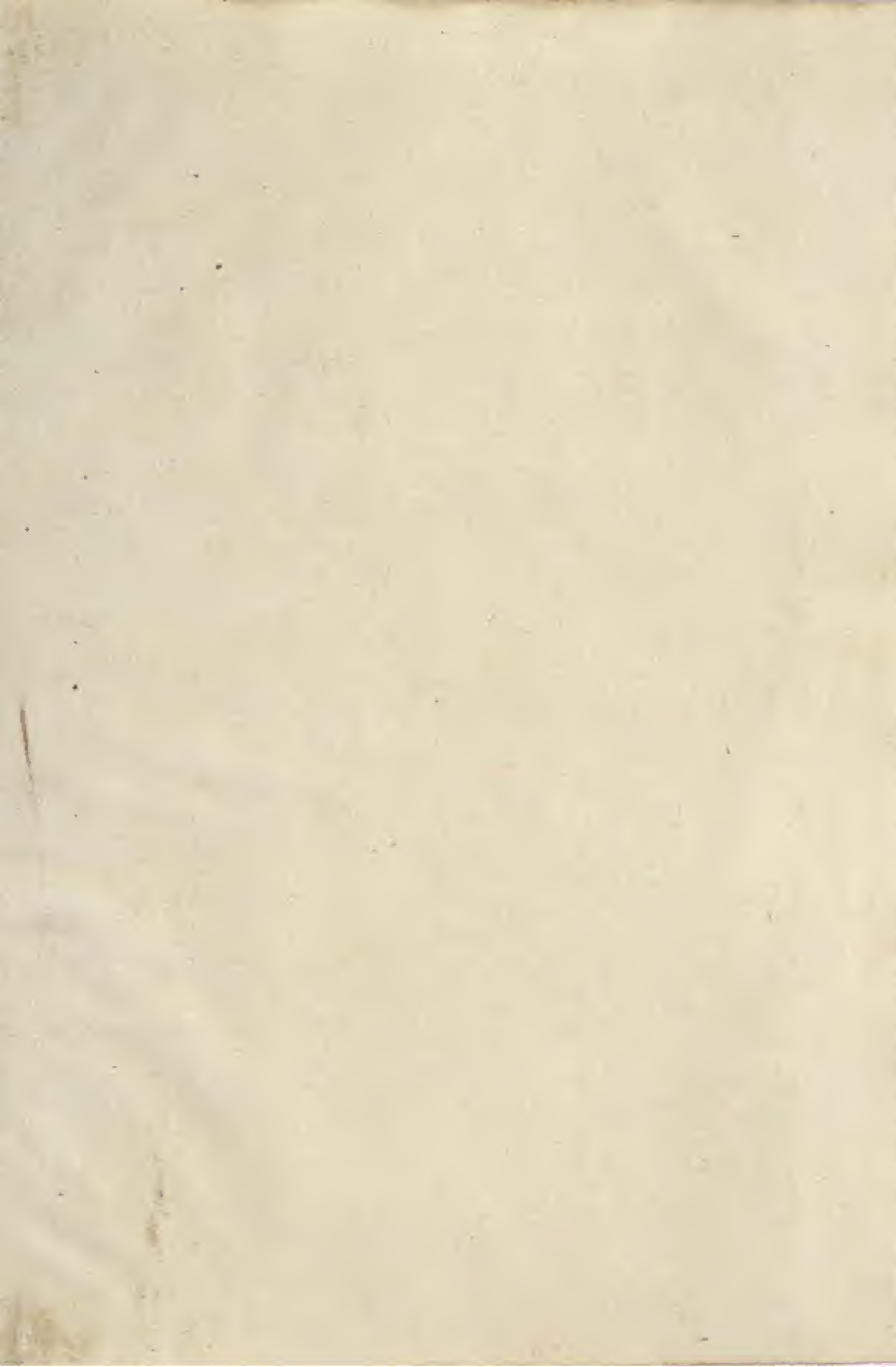
PLATE XIV, Fig. 1

Kālaka and Śakra disguised as an old man. Western Indian School, end of the 14th century A. D.

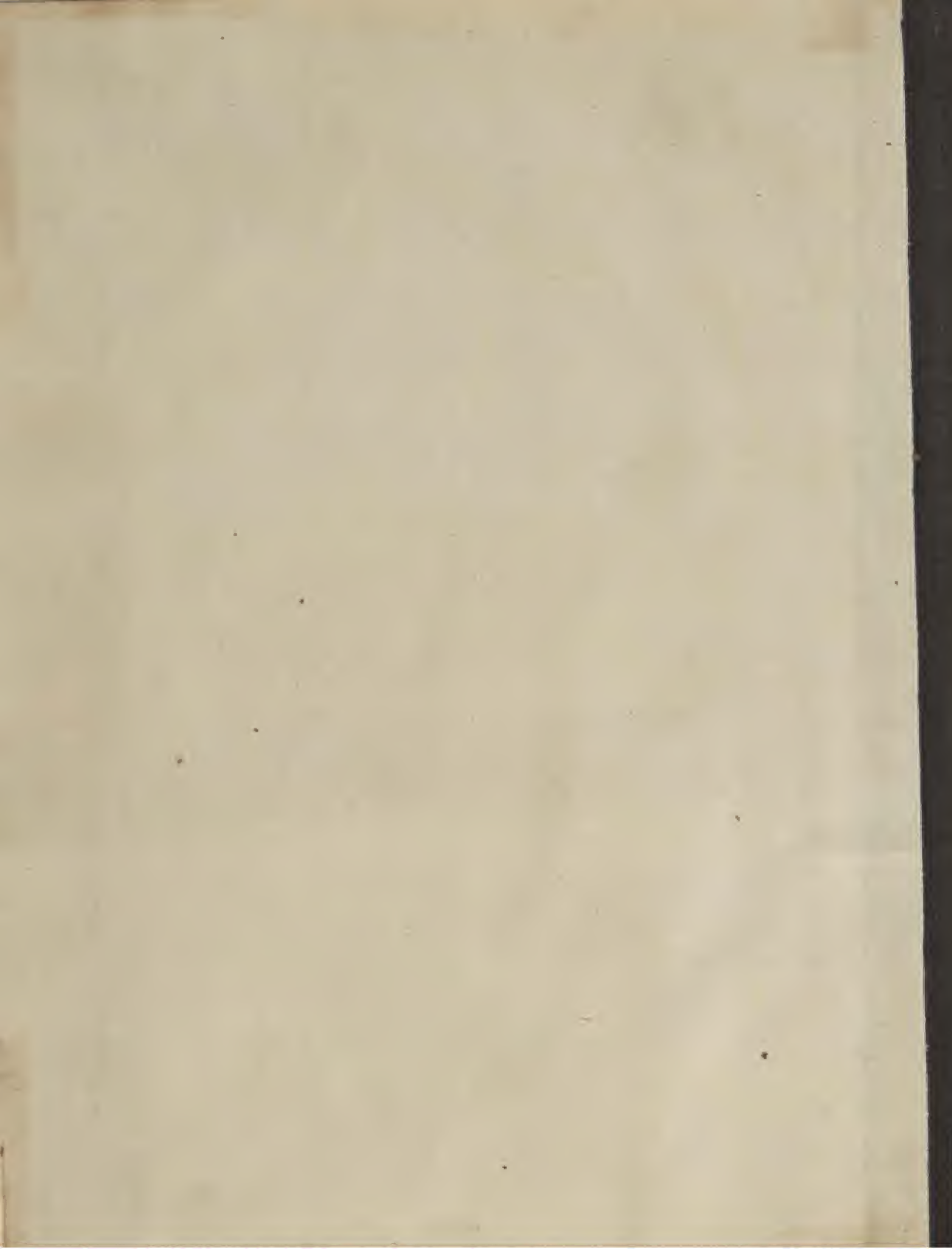


55.65 (f.106)

Fig. 2







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A. Banerjee	22/7/85	25/1/86

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